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8/03

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### **Dear Porsche Owner,**

We would like to thank you for your purchase of a Porsche Sports car.

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

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

formation. Please take the time to read this manual before you drive your new Porsche. Become familiar with the operation of your Porsche car for maximum safety and operating pleasure. The better you know your Porsche, the more pleasure you will experience driving your new car. Always keep your Owner's Manual in the car, and give it to the new owner if you ever sell your Porsche.

This Owner's Manual contains a host of useful in-

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

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

#### For U.S. only:

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

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

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

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

# Any alteration of the vehicle may negate or interfere with those safety features built into the vehicle.

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

Do not misuse your Porsche by ignoring those laws and driving conditions, or by ignoring the instructions in this manual. Any alteration or misuse of the vehicle can lead to accidents and severe or fatal personal injuries.

Regularly check your vehicle for signs of damage.

Damaged or missing aerodynamic components such as spoilers, rear wing or underside panels affect the driving behavior and therefore must be replaced immediately.

Your car may have some or all of the components described in this manual.

Should you have difficulty understanding any of the explanations of features or equipment installed in your vehicle, contact your authorized Porsche dealer. He/She will be glad to assist you. Also check with your dealer on other available options or equipment.

Throughout this booklet, left is designated as the driver's side of the vehicle, and right as the passenger's side of the vehicle.

Text, illustrations and specifications in this manual are based on the information available at the time of printing.

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

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

# / Important!

For your own protection and longer service life of your car, please heed all operating instructions and special warnings. These special warnings use the safety alert symbol, followed by the words **Danger, Warning and Caution**. These special warnings contain important messages regarding your safety and/or the potential for damage to your Porsche. Ignoring them could result in serious mechanical failure or even physical injury.

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

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

#### Note to owners

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

#### Note aux proprietaires

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

Porsche Cars Canada, Ltd. Automobiles Porsche Canada, LTEE

5045 Orbitor Drive Building #8, Suite 200 Mississauga, Ontario Canada L4W 4Y4

Telephone number for customer assistance: 1-800-PORSCHE / Option 3

# **Fuel Quality**

Your engine is designed to provide optimum performance and fuel economy using unleaded premium fuel with an octane rating of 98 RON (93 CLC or AKI).

Porsche therefore recommends the use of these fuels in your vehicle.

Porsche also recognizes that these fuels may not always be available. Be assured that your vehicle will operate properly on unleaded premium fuels with octane numbers of at least 95 RON (90 CLC or AKI), since the engine's "Electronic Oktane™ knock control" will adapt the ignition timing, if necessary.

## **Fuels containing alcohol and ether**

Some areas of the U.S. require oxygenated fuels during certain times of the year. Oxygenated fuels are fuels which contain alcohols (such as methanol or ethanol) or ether (such as MTBE).

Under normal conditions, the amount of these compounds in the fuel will not affect driveability.

You may use oxygenated fuels in your Porsche, provided the octane requirements for your vehicle are met. We recommend, however, to change to a different fuel or station if any of the following problems occur with your vehicle:

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

# **Fuels containing MMT**

Some North American fuels contain an octane enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT). If such fuels are used, your emission control system performance may be negatively affected.

The check engine warning lights on your instrument panel may turn on.

If this occurs, Porsche recommends you stop using fuels containing MMT.

# **Tire Pressures for Cold Tires**

**Front** 32 psi (2.2 bar)

**Rear** 32 psi (2.2 bar)

These tire pressures are valid only for Porsche approved tires.

For replacement tires it is imperative that you consult the Technical Data and Tires, Wheels sections of this manual and follow the recommendations contained therein.

# **Porsche and the Environment**

# **Environmental guidelines**

We develop and produce exclusive sports cars with advanced environmental and safety technology and a great ability to fascinate.

# Our environmental policy is based on the following principles:

- The maximum possible use of environmental and safety technology that is economically justifiable.
- Economical usage of energy and resources.
- Involvement of our business partners and contractors in our efforts to protect the environment.
- Open dialogue with all social groups.

## **California Proposition 65 Warning**



Engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. In addition, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

## **Production**

Whether in production or repair, Porsche always relies on environmentally friendly technology.

A waste-management system has been introduced to reduce the amount of waste while simultaneously increasing the recycling rate.

Waste water leaves the Porsche factory only after being appropriately treated.

# **Environmentally friendly vehicles**

Modern environmental technology ensures compliance with all emission laws applicable worldwide.

#### These have the following advantages:

- Rapid operational readiness of the catalytic converters ensures low emissions, even in short-trip operation.
- Reliable operation and good emission control over a long useful life.
- Please refer to the chapter "FUEL ECONOMY" on page 124.

# Recycling – for a Porsche, this is virtually an academic question

More than two-thirds of all Porsches ever built are still running.

# Just in case recycling is ever necessary, we take the following precautionary measures:

- Identification of all materials.
- Use of recyclable materials.
- Reusable components designed for simple removal.
- These reasons result in a further increase in the recycling rate which is currently 80 per cent.

# **Emission control is built in**

Innovative engine technology combines high engine performance and environmental compatibility.

The engine diagnosis system electronically monitors the components and systems that affect exhaust gases.

This continuous monitoring and fault storage enables swift, reliable diagnosis and fault detection.

Any fault messages are indicated to the driver by the "Check Engine" warning light and the on-board computer.

▶ Please refer to the chapter "WARNINGS IN THE INSTRUMENT PANEL AND IN THE ON-BOARD COMPUTER" on page 81.

#### **Child Seats**



#### Risk of death or serious injury.

- Do not allow children under the age of 12 to sit in this car. The Carrera GT has frontal airbags and does **not** have an airbag deactivation system. Children in child seat or booster seat are at risk for serious personal injuries or death if the front airbag deploys.
- ▶ Do not install the Porsche child seat on your passenger seat.

#### **Technical modifications**

Modifications may be carried out on your vehicle only if approved by Porsche. This ensures that your Porsche will remain reliable and safe to drive, and that it will not be damaged as a result of the modifications.

Your authorized Porsche dealer will be pleased to advise you.

# Chassis, body

The special features of carbon fiber technology require that checking and damage analysis on the chassis and body (e.g. after accidents) must only be performed by an authorized Porsche dealer.

## **Special features of the vehicle surface**

Depending on the color and incident light, the carbon fiber structure of the body surface can be visible at high temperatures and high humidity. This phenomenon is a result of the technology and design.

### **Coverings**

Do not affix any coverings (e.g. films or "stone guards") in the area of the headlights and air intakes.

Damage due to excessive temperatures and abrasion could result.

#### **Ground clearance**



Risk of damage.

The vehicle may touch the ground as a result of the limited ground clearance.

- Drive carefully and slowly on steep slopes (e.g. parking lots), curbs, uneven surfaces, lifting platforms, etc.
- ▷ Avoid steep ramps.
- Please refer to the chapter "TOWING, RECOVERY" on page 172.

#### **Power transmission. brakes**

The differential lock, which was designed for driving on the race track, may make a slight noise when maneuvring and on tight corners.

The high-performance brake system is designed for optimal braking effect at all speeds and temperatures.

Certain speeds, braking forces and ambient conditions (such as temperature and humidity) therefore might cause brake noises.

Wear on the different components of the braking system, such as brake pads or brake discs, depends to a great extent on the individual driving style and the conditions of use and therefore cannot be expressed in actual miles on the road. The values communicated by Porsche are based on normal operation adapted to traffic. Wear increases considerably when the vehicle is driven on race tracks or through an aggressive driving style.

Before using your vehicle in this way, please consult an authorized Porsche dealer about the guidelines which currently apply.

#### Traction Control

Traction Control should always be switched on during "normal" driving.

This is particularly the case when the road is wet.

### **Aerodynamic components**

To benefit from the high driving performance without impairing the driving safety or the service life of the vehicle components, certain vehicle parts must be always fully operational while driving.

Regularly check your vehicle for signs of damage.

Damaged, worn or missing aerodynamic components such as spoilers, rear wing or underside panels affect driving behavior and must therefore be replaced immediately.

The aerodynamic stability of the vehicle is influenced considerably at high speeds by the front lip.

Due to the **small ground clearance** required for vehicle handling optimization, the front lip has to be placed in an exposed position to fulfill its function. It can be **damaged**, for example by ground or curbstone contact.

#### Roof panels

Driving with only one roof panel installed is not permitted for aerodynamic reasons.

#### **Automatic car washes**



Risk of damage to diverse vehicle components and to the wheels.

Do not wash the vehicle in automatic car washes.

# Engine compartment venting, exhaust system



Danger of burning.

The area where the engine compartment is vented behind the rear wing and the tailpipes of the exhaust system can become very hot.

Do not touch this area.
 Look out for children.
 Parts of clothing can become damaged.

#### **Engine compartment lid, rear wing**



Risk of injury during manual retraction or extension of the rear wing with the vehicle stationary.

Make sure that no persons or objects are within the range of movement of the rear wing.

# Risk of pinching between the rear wing and engine compartment lid when closing the lid.

- ▶ When closing, put your hand on the lid and press the lid until it engages.
- ▶ Please observe the appropriate chapters of this Manual.

# Setting and operating vehicle components when driving



There is a danger of accident if you set or operate the on-board computer, radio, navigation system, telephone or other equipment when driving.

This could distract you from the traffic and cause you to lose control of the vehicle resulting in serious personal injury or death.

- Operate the components while driving only if the traffic situation allows you to do so safely.
- Carry out any complicated operating or setting procedures only with the vehicle stationary.

#### **Portable fuel containers**



Portable fuel containers, full or partially empty, may leak, causing an explosion, or result in fire in case of an accident.

Never carry additional fuel in portable containers in your vehicle.

## **Engine Exhaust**



Engine exhaust is dangerous if inhaled. Engine exhaust fumes have many components which you can smell. They also contain carbon monoxide (CO), which is a colorless and odorless gas.

Carbon monoxide can cause unconsciousness and even death if inhaled.

Never start or let the engine run in an enclosed, unventilated area.
 It is not recommended to sit in your car for prolonged periods with the engine on and the car not moving.

### **Motor racing**

Motor racing is a term we associate with fascination and emotion.

On the one hand.

On the other hand, there's the technology that makes this fascination possible.

Your new Carrera GT has been developed with experience gained from the development and use of countless GT vehicles, and has been equipped with technical preconditions that facilitate use away from public roads on the racing circuit.

Depending on use, it can be possible or necessary to adapt the vehicle to the respective conditions. In this case, it must always be taken into account that a modern high-performance sports car represents a complex system with individual components that are carefully designed and adjusted to work together perfectly.

Interfering in this system is only an option if it can be guaranteed that all of the components will continue to work together in a manner adjusted to the actual conditions of use. Well-founded specialist knowledge is necessary for this. You should seek advice from your authorized Porsche dealer.

Please bear in mind that use on race tracks subjects all vehicle components to considerably more wear than normal use, making professional inspection and maintenance after each use a vital precondition for functioning and safety. Please use only Original Porsche Parts for your car. These parts are available from your authorized Porsche dealer, who is knowledgeable as regards the range of approved parts and will be pleased to advise you further.

For reasons of safety, the braking system, steering, running gear, wheels and tires of your car should be checked after every use on a race track.

## On public roads

On public roads, all vehicle components must be in the standard position.

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# **Controls, Instruments**

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# **Dear Porsche Owner**

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

#### the safe driver...

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

You will find helpful hints in this manual on how to perform most of the checks listed on the following

If in doubt, have these checks performed by your authorized Porsche dealer.

# Before driving off...

## **Check the following items first**

- ▶ Turn the engine off before you attempt any checks or repairs on the vehicle.
- ▷ Be sure the tires are inflated correctly. Check tires for damage and tire wear.
- ▷ See that central wheel nuts are properly tightened.
- ▷ Check engine oil level, add if necessary. Make it a habit to have engine oil checked with every fuel filling.
- ▷ Check all fluid levels such as windshield washer and brake fluid.
- ▷ Be sure the vehicle battery is fully charged and cranks the engine properly.
- ▶ Check all doors and lids for proper operation and latch them properly.
- ▷ Check, and if necessary replace a worn or cracked wiper blade.
- ▷ See that all windows are clear and unobstructed.
- Check air intake slots and area between front lid and windshield are free of snow and ice, so the heater and the windshield wiper work prop-
- ▷ Check all exterior and interior lights for operation and that the lenses are clean.

- ▷ Check the headlights for proper aim, and if necessary, have them adjusted.
- Check under the vehicle for leaks.
- ▶ Be sure all luggage is stowed securely.

## **Emergency equipment**

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

Some of the items you should have are: window scraper, snow brush, container or bag of sand or salt, emergency light, small shovel, firstaid kit. etc.

## In the driver's seat...

- ▷ Check operation of the horn.
- Position seat for easy reach of foot pedals and controls.
  - To reduce the possibility of injury from the airbag deployment, you should always sit back as far from the steering wheel as is practical, while still maintaining full vehicle control.
- ▶ Adjust the inside and outside rear view mirrors.
- ▶ Buckle your safety belts.
- ▶ Check operation of the foot and parking brake.
- ▶ Check all warning and indicator lights with ignition on and engine not running.
- Start engine and check all warning displays for warning symbols.
- ▶ Never leave an idling car unattended.
- ▶ Lock doors from inside to prevent inadvertent opening of doors from inside or outside. Drive with doors locked.

## On the road...

- ▶ Never drive after you have consumed alcohol or drugs.
- ▷ Always have your safety belt fastened.
- ▷ Always drive defensively. Expect the unexpected.
- ▶ Use signals to indicate turns and lane changes.
- ▶ Turn on headlights at dusk or when the driving conditions warrant it.
- ▶ Always keep a safe distance from the vehicle in front of you, depending on traffic, road and weather conditions.
- ▶ Reduce speed at night and during inclement weather. Driving in wet weather requires caution and reduced speeds, particularly on roads with standing water, as the handling characteristics of the vehicle may be impaired due to hydroplaning of the tires.
- ▷ Always observe speed limits and obey road signs and traffic laws.
- ▶ When tired, get well off the road, stop and take a rest. Turn the engine off. Do not sit in the vehicle with engine idling. Please observe the chapter "ENGINE EX-HAUST" on Page 10.

- ▶ When parked, always set the parking brake. Move the gearshift lever to reverse or first
  - On hills also turn the front wheels toward the curb.
- ▶ When emergency repairs become necessary, move the vehicle well off the road. Turn on the emergency flasher and use other warning devices to alert other motorists. Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.
- ▶ Make it a habit to have the engine oil checked with every fuel filling.

# **Break-in hints for the first** 1.000 miles/1.600 kilometers

The following tips will be helpful in obtaining optimum performance from your new Porsche.

Despite the most modern, high-precision manufacturing methods, it cannot be completely avoided that the moving parts have to wear in with each other. This wearing-in occurs mainly during the first 1.000 miles/1.600 km.

#### Therefore:

- Preferably take longer trips.
- ▶ Avoid frequent cold starts and short-distance driving whenever possible.
- ▶ Avoid full throttle starts and abrupt stops.
- ▷ Do not exceed maximum engine speed of 4,200 rpm (revolutions per minute).
- ▷ Do not run a cold engine at high rpm either in Neutral or in gear.
- ▷ Do not let the engine lug, especially when driving uphill. Shift to the next lower gear in time (use the most favorable rpm range).
- ▶ Never lug the engine in high gear at low speeds. This rule applies at all times, not just during the break-in period.

▷ Do not participate in motor racing events. sports driving schools, etc. during the first 1.000 miles/1.600 kilometers.

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

## Break-in brake pads and discs

New brake pads and discs have to be "broken in", and therefore only attain optimal friction when the car has covered several hundred miles or km. The slightly reduced braking ability must be compensated for by pressing the brake pedal harder. This also applies whenever the brake pads and brake discs are replaced.

#### New tires

New tires do not have maximum traction. They tend to be slippery.

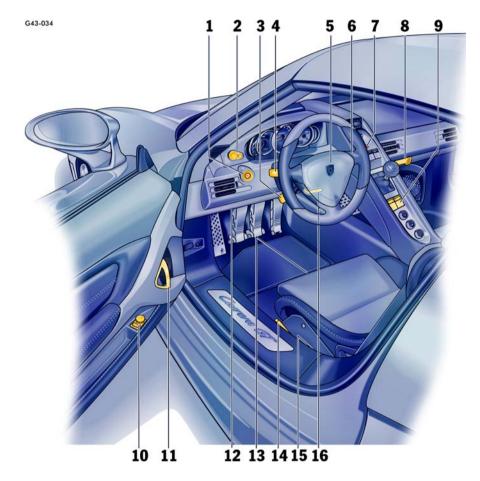
▶ Break in new tires by driving at moderate speeds during the first 60 to 120 miles/100 to 200 km. Longer braking distances must be anticipated.

### **Engine oil consumption**

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

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

▶ Make a habit of checking engine oil with every fuel filling, add if necessary.



- 1 Ignition/starter switch with steering lock
- 2 Light switch
- 3 Operating lever for on-board computer 4 Turn signal/headlight dimmer,
- flasher lever
- 5 Horn
- 6 Windshield wiper/washer lever
- 7 Emergency flasher switch 8 Glove compartment with socket 9 Power window switch
- 10 Door mirror control
- 11 Inner door handle
- 12 Diagnostic socket

- 13 Seat adjustment 14 Parking brake 15 Front lid release,
- engine compartment lid release 16 Steering-wheel adjustment

# Never invite car theft!

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

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

The gong alarm will sound if you open the driver's door while the key is still in the ignition lock. It is your reminder to pull the key out of the ignition lock and to lock the doors.



Any uncontrolled movement of the vehicle may result in serious personal injury and property damage.

Never leave your vehicle unattended with the key in the ignition lock, especially if children and/or pets are left unattended in the vehicle. They can operate power windows and other controls. If the engine is left running, they may accidentally engage the shift lever.

- ▷ Always remove the ignition key.
- ▷ Always set the parking brake.
- ▶ Lock the doors with the key or with the remote control.



Risk of a serious accident.

The steering column will lock if you remove the key while you are driving or as the car is rolling to a stop. You will not be able to steer the car.

▶ Never remove the key from the steering lock while you are driving.

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

- Close windows.
- ▷ Install the removable roof panels.
- Remove ignition key.
- ▶ Engage steering lock.
- ▶ Lock glove compartment.
- ▶ Remove valuables (e.g. car documents, telephone, house keys) from the car.
- ▷ Lock doors.

# Kevs

- ▶ Please observe the chapter "ALARM SYSTEM. INFRARED PASSENGER COMPARTMENT MON-ITORING" on Page 24.
- ▶ Please observe the chapter "CENTRAL LOCK-ING" on Page 22.

Two main keys and one spare key are supplied with your Porsche.

These keys operate all the locks on your vehicle.

- ▶ Be careful with your car keys: do not part with them except under exceptional circumstances.
- ▶ To avoid battery run-down, always remove the ignition key from the ignition lock.

### Replacement kevs

Replacement car keys can be obtained only from your authorized Porsche dealer, and this can sometimes be very time-consuming.

You should therefore always keep the spare key on your person.

Keep it in a safe place (e.g. wallet), but under no circumstances in or on the vehicle.

The key codes of new keys have to be "reported" to the car control unit by your authorized Porsche

The key grip of the spare key can be exchanged for a main-key grip.

### Disabling key codes

If a key is lost, the key codes can be disabled by an authorized Porsche dealer.

All the remaining car keys are required for this pur-

Disabling the code ensures that the car can be started only using authorized keys.

#### Note

▶ Please note that the other locks can still be opened with the disabled key.

#### **Immobilizer**

There is a transponder (an electronic component) in the key grip, containing a stored code. When the ignition is switched on, the ignition lock

checks the code.

The immobilizer can be deactivated and the engine started only using an authorized ignition key.

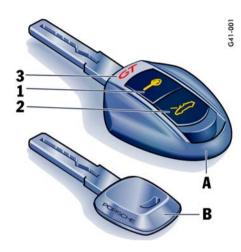
### Switching off the immobilizer

▶ Insert the ignition key into the ignition lock.

If the ignition was on longer than 2 minutes without the engine starting, the engine starts with a short delay.

#### Switching on the immobilizer

Withdraw the ignition key.



- **A** Main key **1** Central locking button
- 2 Front lid button
- 3 Light-emitting diode
- B Spare key

# **Key with Radio Remote Control**

# **Unlocking vehicle**

▶ Briefly press button 1.

# Locking vehicle

▶ Briefly press button 1.

# **Unlocking front lid**

▶ Press button 2 for approx. two seconds.

If the vehicle was locked, it is unlocked simultaneously with the front lid.

The vehicle will be locked again approx. 15 seconds after the front lid is closed if none of the doors was opened.

#### Note

Your authorized Porsche dealer can program further types of unlocking.

## Type 1

The relocking time of the doors can be adjusted to suit your individual requirements:

4 - 120 seconds.

## Type 2

The doors stay locked when the front lid is unlocked.

## The remote-control standby function switches off after 5 days

If the vehicle is not started or unlocked with the remote control within five days, the remote control standby function is switched off (to prevent discharging of the vehicle battery).

- 1. In this case, unlock the driver's door with the key at the door lock. Leave the door closed in order to prevent the alarm system from being triggered.
- 2. Press button 1 on the remote control.

The remote control is now activated again.

# **Doors**

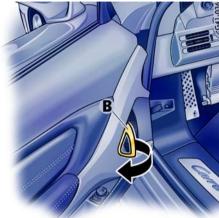
If the door windows are closed, they will be automatically opened by a few millimeters when the doors are opened and, when the doors are closed, they will be closed again. This makes it easier to open and close the doors and protects the window seals.

▶ Therefore, you should pull the door handle slowly so that the door window can be lowered before the door is opened.



# **Opening unlocked doors from outside**

Slowly pull door handle **A**.



# **Opening unlocked doors from inside**

▷ Slowly pull door handle **B**.

# **Opening locked doors from inside**

▷ Slowly pull door handle **B** twice. Please observe the chapter "LOCKING CONDI-TIONS" on Page 22.

# **Central Locking**

USA: FCC ID LXPRKY 116:

FCC ID LXPVIM 145

Canada: TxF 315P 2255 102 275; RxF 315P 2255 102 276 A

This device complies with: Part 15 of the FCC Rules RSS-210 of Industry Canada.

Operation of this device is subject to the following two conditions:

- It may not cause harmful interference, and
- it must accept any interference received including interference that may cause undesired operation.

#### Note

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Such modification could void the user's authority to operate this equipment.

- Please observe the chapter "LOAD SWITCH-OFF AFTER TWO HOURS OR FIVE DAYS" on Page 156.
- ▶ Please observe the chapter "POWER WIN-DOWS" on Page 26.

Both car doors and the filler flap can be centrally unlocked or locked with the remote control.

The vehicle cannot be locked if the driver's door is not completely closed.

A short **signal from the alarm horn** will draw your attention to the fact that the following components are not completely closed when you try to lock the vehicle:

- Passenger's door
- Front lid
- Engine compartment lid
- Glove compartment

#### Note

Unlocking the vehicle by using the key in the door lock and opening the door may activate the alarm system within 10 seconds.

# **Automatic relocking**

If the car is unlocked by remote control and none of the car doors is opened within approx. 60 seconds, automatic relocking takes place. This relocking time can be adapted to your individual requirements (4 - 120 seconds) by an authorized Porsche dealer.

## **Locking conditions**

▶ Lock car once.

The doors cannot be opened from the outside. Alarm system and infrared passenger compartment monitoring are switched on.

#### If a person or animal remains in the vehicle:

▷ Ouickly lock car twice.

The doors cannot be opened from the outside. The infrared passenger compartment monitoring is switched off.

#### Unlocking the door with the inner door handle

Any person remaining in the locked car can open the door with the inner door handle:

- 1. Pull inner door handle once to unlock door lock.
- 2. Pull inner door handle again to open door.

#### Note

Inform any person remaining in the car that the alarm system will be triggered if the door is opened.

### **Emergency operation – opening**

▶ Unlock the driver's door with the key at the door lock.

Open the door and switch the ignition on within 10 seconds in order to prevent the alarm system from being triggered.

## **Emergency operation – closing**

ing system is switched off.

▷ Quickly turn the key in the driver's door lock to the lock position three times in succession. If there is a defect in the central locking system, all functioning elements of the central locking system will be locked. The alarm system is switched on. The infrared passenger compartment monitor-

The fault should be remedied immediately at an authorized Porsche dealer.

## Indication by emergency flasher and alarm horn

If the **remote control** is used for unlocking or locking, a response is provided by the emergency flasher:

- Unlocking single flash.
- Locking double flash.
- Locking twice continuous illumination for approx. 2 seconds and short alarm-horn signal.



# **Central locking switch**

The central locking switch **A** on the center console lets you lock and unlock both doors electrically.

#### Note

If the doors are locked with the key or remote control, they can not be opened by pressing the central locking switch.

#### Locking

▶ Press the key symbol on the switch. With the ignition switched on, the key symbol lights up red.

### Unlocking

▶ Press the lower half of the switch. The red key symbol goes out.

If the doors were locked with the central locking switch, they can be opened by pulling the inner door handle:

- 1. Pull inner door handle once to unlock door lock.
- 2. Pull inner door handle again to open door.

## **Automatic door locking**

Your authorized Porsche dealer can program diverse types of automatic door locking in the control unit of the central locking system:

#### Type 1

Doors lock automatically when the ignition is switched on.

## Type 2

Doors lock automatically when a speed of 3 - 6 mph (5 - 10 km/h) is exceeded.

#### Type 3

Doors lock automatically when the ignition is switched on. If doors are opened with the engine running, they lock again automatically when a speed of 3 - 6 mph (5 - 10 km/h) is exceeded.

#### Type 4

The doors do not lock automatically.

#### Note

Automatically locked doors can be unlocked with the central locking button or opened by pulling on the inside door handle twice.

# /!\Warning!

In an emergency situation where you need to exit the car through an automatically locked door, remember the following procedure to open the door.

- ▶ Unlock the doors by pressing the central locking button or
- ▶ pull the inside door handle **twice** to open the

#### **Fault indication**

A double horn signal during locking indicates a defect in the central locking or alarm system. Have the defect remedied at an authorized Porsche dealer.

# **Overload protection**

If the central locking system is operated more than ten times within a minute, further operation is blocked for 30 seconds.



# Alarm System, **Infrared Passenger Compartment Monitoring**

The alarm system and infrared passenger compartment monitoring system are switched on when the doors are locked with the key or remote control.

▶ Please observe the chapter "CENTRAL LOCK-ING" on Page 22.

Unlocking the vehicle by using the key in the door lock and opening the door may activate the alarm system within 10 seconds.

#### **Function indication**

If the alarm system is activated, key symbol A in the central locking switch flashes.

If, after locking, the key symbol does not flash or, after ten seconds, it emits double flashes, then not all alarm contacts are closed. Additionally, a brief horn signal sounds.

When the doors are unlocked, the alarm system and infrared passenger compartment monitoring system are switched off and the key symbol goes off.

#### When the alarm is armed, the following areas are monitored

- Doors
- Front lid
- Engine compartment lid
- Glove compartment
- Passenger compartment

If one of these alarm contacts is interrupted, the alarm horn sounds for approximately 3 minutes. Additionally, the emergency flasher and the passenger compartment light flash for approximately five minutes.

When the alarm is triggered, the key symbol A changes over to double flashes.

In order not to limit the action range of the infrared passenger compartment monitoring system:

▶ Move sun visors to one of the final positions.

## **Deactivating the infrared passenger** compartment monitoring system for one locking process

If a person or animal remains in the car while it is locked, the infrared passenger compartment monitoring system must be switched off.

- ▷ Quickly lock car twice. The doors are locked but can be opened from the inside:
- 1. Pull inner door handle once to unlock door
- 2. Pull inner door handle again to open door.

#### Note

▶ Inform any person remaining in the car that the alarm system will be triggered if the door is opened.

#### **Fault indication**

A double horn signal during locking indicates a defect in the central locking or alarm system.

▶ Have the defect remedied at an authorized Porsche dealer.



# **Power Windows**



Risk of injury when the door windows close. This applies especially if the windows are closed with the comfort function, because with this function the window goes up automatically.

▶ Make sure nobody can be injured when the windows close.

- ▶ Remove the ignition key to shut off power to the window switches when the vehicle is not attended by a responsible person. Uninformed persons could injure themselves by operating the power windows.
- ▷ Do not leave children in the car unattended.

#### Risk of an accident.

▷ Do not put anything on or near the windows that may interfere with the driver's vision.

# **Readiness for operation of power windows**

- With engine running or
- in ignition key position 1 or
- with door closed and ignition key withdrawn: only until first opening of the door.



## **Opening windows**

▶ Press the lower half of the rocker switch A until the window has reached the desired position.

#### One-touch operation

▶ Press the lower half of the rocker switch A briefly. Window moves to its final position. Press again to stop the window in the desired position.

#### Comfort function when unlocking the vehicle

▶ Unlock car with the remote control. Hold car key in door lock in the unlocking direction until the windows have lowered to the desired position.



## **Closing windows**

▶ Press the upper half of the rocker switch **A** until the window has reached the desired position.

#### One-touch operation

▶ Press the upper half of the rocker switch A briefly.

Window moves to its final position. Press again to stop the window in the desired position.

#### Comfort function when locking the vehicle at the door lock

▶ Hold car key in door lock in the locking direction until the windows have closed to the desired position.

## **Anti-crushing protection**

If a side window is blocked during closing, it will stop and open again by about an inch.



Risk of severe personal injuries. If the rocker switch is pressed again within 10 seconds of the window being blocked, the window will close with its full closing force. Anti-crushing protection is disabled.

▷ Once the anti-crushing protection acts to stop the window and opens it slightly, do not press the rocker switch again within 10 seconds without checking to make sure that nothing is blocking the path of the window. The window will close with full closing force.

One-touch operation is disabled for 10 seconds after blockage of a side window.

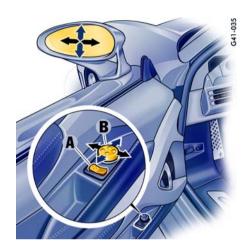
### **Automatic window lowering**

▷ Please observe the chapter "DOORS" on Page 21.

# Storing end position of the windows

If the battery is disconnected and reconnected, the windows will not be raised automatically when the door is closed.

- 1. Close the windows with the rocker switch
- 2. Press upper half of rocker switch again to store the end position of the windows in the control unit.



**A** - Selector switch, driver's/passenger's side **B** - Mirror adjustment

# **Rear View Mirrors**

Before driving the vehicle, adjust the outside and inside mirrors.

It is important for safe driving that you have good vision to the rear.

# **V** Warning!

#### Risk of an accident.

▷ Do not put anything on or near the windows or the mirrors that may interfere with the driver's vision.

#### **Door mirrors**

The mirror housing is hinged and can be folded flat against the car to prevent damage in the tight parking areas.

## Adjusting

- 1. Select driver's side or passenger's side with rocker switch A.
- 2. Move the door mirror glasses in the appropriate direction using the control switch B.

#### If the electrical adjustment facility fails

▷ Adjust mirror by pressing on the mirror face.

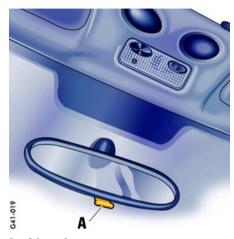
# **Door mirror heating**

The door mirror heating switches on automatically at temperatures below approx. 37°F/3°C and switches off automatically at temperatures above 37°F/3°C.

## Switching on door mirror heating

Regardless of the outside temperature, the door mirror heating is switched on together with the defrost function of the windshield.

▶ Please observe the chapter "DEFROSTING WINDSHIELD AND SIDE WINDOWS" on Page 95.



# **Inside mirror**

When the mirror is being adjusted, the anti-glare lever **A** must point forward.

Basic position: lever forward Anti-glare position: lever back

# **Seat Adjustment**



The seat may move unexpectedly if you attempt to adjust while driving. This could cause sudden loss of control or personal injury.

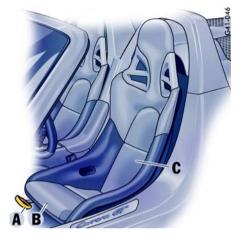
▷ Do not adjust seats when the vehicle is in motion.

## Seat position

A correct sitting position is important for safe and fatigue-free driving.

We recommend the following procedure for adjusting the driver's seat to suit individual requirements:

- 1. Adjust the seat until, with the accelerator pedal fully depressed, your leg is straight but your entire foot still rests on the accelerator pedal.
- 2. Grip the top half of the steering wheel. Set the steering-wheel position so that your arms are almost outstretched. However, your shoulders must still rest on the backrest.
- 3. If necessary, correct the seat fore-and-aft adjustment.



#### Fore and aft

▶ Raise locking lever A. Move seat to desired position and release

Ensure that the seat engages correctly.

#### Seat height adjustment

It is possible to adjust the height of both seats.

As the seat mounting must be loosened to adjust the height, this must only be done by an authorized Porsche dealer.

## Thigh support area

Changing the front seat cushion **B** can adjust the height of the thigh support area.

#### Lumbar cushion (pelvis and spinal column support)

There is a height-adjustable lumbar cushion below the back cushion.

- ▷ Carefully loosen the back cushion **C** from the bottom upward (Velcro fastening strip).
- ▶ Loosen the lumbar cushion (Velcro fastening strip) and tighten in the desired position.
- ▷ Carefully press the back cushion **C** into the correct position from the top downward.

# **Steering Wheel Adjustment**

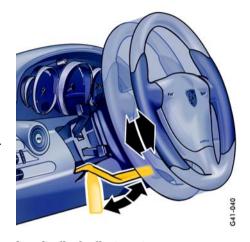


Risk of accident.

The steering wheel may move further than desired if you attempt to adjust it when driv-

You may lose control of the vehicle.

▷ Do not adjust the steering wheel when driving.



# **Longitudinal adjustment**

- 1. Push locking lever downwards.
- 2. Adjust steering wheel to your seat position by moving the steering wheel longitudinally.
- 3. Swivel locking lever back until you feel it engage.

If necessary, move steering wheel slightly longitudinally, to ensure engagement.

# **Safety Belts**



Always make sure your and your passenger's safety belts are properly fastened while the vehicle is in motion.

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

▶ For your and your passenger's protection, use safety belts at all times while the vehicle is in

#### Proper wearing of safety belts

- ▷ Safety belts must be positioned on the body so as to restrain the upper body and lap from sliding forward. Improperly positioned safety belts can cause serious personal injury in case of an accident.
- ▶ The shoulder belt should always rest on your upper body. The shoulder belt should never be worn behind your back or under your arm.
- ▶ For maximum effectiveness, the lap belt should be worn low across the hips.
- ▶ Pregnant women should position the belt as low as possible across the pelvis. Make sure it is not pressing against the abdomen.

- ▷ Belts should not be worn twisted.
- ▷ Do not wear belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, keys, etc. as these may cause injury.
- ▷ Several layers of heavy clothing may interfere with proper positioning of belts.
- ▷ Belts must not rub against sharp objects or damage may occur to the belt.
- ▶ Two occupants should never share the same belt at the same time.

#### Care and maintenance

- ▶ Keep belt buckles free of any obstruction that may prevent a secure locking.
- Belts that have been subjected to excessive stretch forces in an accident must be inspected or replaced to ensure their continued effectiveness in restraining you.
  - The same applies to belt tensioner systems which have been triggered.
  - In addition, the anchor points of the belts should be checked.
- ▷ If safety belts do not work properly, see your authorized Porsche dealer immediately.
- ▶ If the belts show damage to webbing, bindings, buckles or retractors, they should be replaced to ensure safe operation.

- ▷ Do not modify or disassemble the safety belts in your vehicle.
- The belts must be kept clean or the retractors may not work properly. Please observe the chapter "CAR CARE IN-STRUCTIONS" on Page 135.
- ▶ Never bleach or dye safety belts.
- ▷ Do not allow safety belts to retract until they are completely dry after cleaning or this may cause damage to the belt.

#### **Belt tensioner**

Depending on the force of an impact, fastened safety belts are tightened in an accident.

#### The belt tensioners are triggered in:

Front and rear impacts

#### The belt tensioners are not triggered in:

- Side impacts
- Vehicle overturning

#### Note

The belt tensioner system can be triggered only once; the system must be replaced afterwards. Work may be performed on the belt-tensioner system only by an authorized Porsche dealer. Smoke is released when the belt tensioners are triggered. This does not indicate a fire in the vehicle.



## **Safety Belt Warning System**

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

Every time the ignition is turned on, the gong will sound for about 6 seconds to remind driver and passenger to buckle up.

In addition, the gong will sound if vehicle speed exceeds 6 mph/10 km/h.

The safety belt warning lights in the instrument panel and on-board computer will go off as soon as the driver has buckled up.

#### Inertia reel retractor

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

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

- ▶ Assume a comfortable sitting position. The shoulder belt should always rest on your upper body. The shoulder belt should never be worn behind your back or under your arm.
- ▶ To fasten, grasp belt and pull the belt in a continuous slow motion across your chest and lap.



- ▷ Insert belt tongue into buckle on inboard side of seat. Push down until it securely locks with an audible click. Pull the belt to check.
- Pull shoulder section to make sure belt fits snugly across the pelvis.
- ▶ Belts should fit snugly across the pelvis and chest. Make sure there is no slack in the belt.
- ▶ To unfasten belt, push in release button (arrow) on buckle. Belt tongue will spring out of buckle.
- ▶ To release a latched belt, lean back to take the body pressure off the belt.
- ▶ To store lap/shoulder belt, allow the belt to retract as you guide the latch to its stowed position.

# **Child Restraint Systems**



## Risk of death or serious injury.

- ▷ Do not allow children under the age of 12 to sit in this car. The Carrera GT has frontal airbags and does not have an airbag deactivation system. Children in child seat or booster seat are at risk for serious personal injuries or death if the front airbag deploys.
- ▷ Do not install the Porsche child seat on your passenger seat.

# **Airbag Systems**

The Airbags in combination with the safety belts makes up a safety system which offers the driver and the passenger the greatest known protection from injuries in case of accident.

Even if your vehicle is equipped with airbags, the safety belts must be worn at all times, because the front airbag system is only actuated by frontal collisions with an impact of sufficient severity.

Below the actuation threshold of the airbag system, and during types of collisions which do not cause the actuation of the system, the safety belts provide the primary protection to the occupants when correctly worn.

Therefore, all persons within the vehicle must always wear safety belts (in many states, state law requires the use of safety belts).

▶ Please observe the chapter "SAFETY BELTS" on Page 32.

The front airbags are located behind the padded steering wheel panel on the driver's side and on the passenger's side in the dashboard. The side airbags are installed in the doors.

#### **Function**

The front airbags are triggered during a frontal collision of sufficient force.

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

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

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

# Danger!

To provide optimal occupant protection, airbags must inflate at very high speed. If you are not wearing your safety belt or are too close to the airbag when its deployed, inflating airbags can result in serious personal iniury or death.

- ▶ Make sure there are no people, animals or obiects between the driver or passenger and the area into which the airbag inflates.
- ▷ Sit back as far from the dashboard or steering wheel as is practical, while still maintaining full vehicle control.
- ▶ Do not lean against the inside of the doors.
- ▷ Always hold the steering wheel by the outer Never rest your hands on the airbag panel.
- ▶ Never transport heavy or sharp objects on or in front of the passenger seat.
- □ Give your passenger all of the information in this chapter.
- ▶ No changes must be made to the wiring or components of the airbag system.

- ▶ Do not add any additional coverings or stickers to the steering wheel or in the area of the passenger airbag and side airbags. Doing so may adversely affect the functioning of the airbag system or cause harm to the occupants if the airbag system should deploy.
- ▷ Do not undertake any wiring for electrical accessory equipment in the vicinity of the airbag wiring harnesses. Doing so may disable the airbag system or cause inflation.
- ▶ If the warning light comes on, the airbag system should be repaired immediately by your authorized Porsche dealer.

#### Note

Airbag components (e.g. steering wheel, door trim) may be disassembled only by an authorized Porsche dealer.

When disposing of a used airbag unit, our safety instructions must be followed. These instructions can be obtained at any authorized Porsche dealer.



## **Warning light**

The central triggering unit monitors the operational readiness of the airbag system and the warning light.

Any malfunctions that may occur will be indicated by the warning lights in the instrument panel and on-board computer.

- > In the following cases you should immediately consult an authorized Porsche dealer in order to assure the airbag system is functioning properly:
- Illumination of the airbag warning light during travel or repeated illumination longer than 5 seconds after the ignition circuit is turned on.
- Illumination fails to light up during ignition circuit activation.

### Airbag maintenance

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

#### Important information

If you sell your Porsche, notify the purchaser that the vehicle is equipped with airbags, and refer them to the chapter, "Airbag Systems", in the owner's manual (safety and disposal rules).

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

## **Child Restraint Systems**



#### Risk of death or serious injury.

- ▶ Do not allow children under the age of 12 to sit in this car. The Carrera GT has frontal airbags and does not have an airbag deactivation system. Children in child seat or booster seat are at risk for serious personal injuries or death if the front airbag deploys.
- ▶ Do not install the Porsche child seat on your passenger seat.

# Clutch Pedal

The clutch pedal must be depressed fully before the starter will engage.



#### Risk of an accident.

▷ Always check the movement of the clutch pedal before driving and make sure that it is not obstructed by a floor mat or any other object.

#### To avoid damage to the clutch and transmission:

- ▷ Always depress the clutch pedal fully when changing gears.
- ▷ Do not hold the car on a steep grade with the clutch pedal partially depressed.

Should the free travel of the clutch pedal suddenly become larger, it could mean a malfunction of the clutch.

▷ See your Porsche dealer for correction.



# **Parking Brake**

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

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

### **Setting the parking brake**

- ▶ Pull the lever **all the way up** (arrow). With the ignition on, the parking brake warning lights in the instrument panel and on-board computer will come on if the lever is even slightly raised. A firm pull upward is required to properly engage the parking brake. If the brake is not fully set, the vehicle may roll without control.
- ▶ Move the gearshift lever to reverse or first
- Before exiting the vehicle, make sure that the parking brake is fully set and the vehicle is not moving at all.



Risk of serious personal injury or death. A partially engaged parking brake may allow the vehicle to roll, causing serious personal injury or death to any person in its path.

- ▶ Engage the parking brake fully.
- ▷ Before exiting the vehicle, make sure that the parking brake is fully set and the vehicle is not moving at all.

# Releasing the parking brake

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



#### Parking brake warning light USA



#### Parking brake warning light Canada

The warning lights in the instrument panel and onboard computer will go out after the parking brake is fully released.

The warning lights are not an indicator that the parking brake is fully set; it is only intended to be a warning to release the parking brake before driving the car.



#### **/!** \ Caution!

A partially engaged brake will overheat the rear brakes, reduce their effectiveness and cause excessive wear.

- ▶ Release the parking brake fully.
- ▶ When parking your car, always set the parking brake by pulling the lever all the way up.
- ▶ Move the gearshift lever to reverse or first
- ▷ On hills also turn the front wheels towards the curb.

#### **Brakes**

- ▶ Please observe the chapter "AERODYNAMIC COMPONENTS" on Page 9.
- ▶ Make it a habit to check the operation of your brakes before driving.

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

▶ Therefore, always maintain a safe distance from the car in front of you.

#### **Brake system function**

Your Porsche is equipped with a power assisted hydraulic dual circuit brake system with disc brakes at the front and rear.

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

If one brake circuit has failed, the other will still operate. However, you will notice an increased pedal travel when you apply the brakes.

Failure of one brake circuit will cause the stopping distance to increase.



#### Risk of an accident. In the unlikely event of hydraulic failure of one brake circuit:

- Push the brake pedal down firmly and hold it in that position.
  - A mechanical linkage activates the second circuit, and you will be able to bring the vehicle to a stop.
- ▶ After bringing your vehicle to a complete stop, avoid driving the vehicle and instead have it towed to the nearest authorized Porsche dealer for repair.



#### **Brake warning light USA**



#### **Brake warning light Canada**

If the warning lights in the instrument panel and onboard computer go on while driving, the brake fluid level may be too low, or (if the brake pedal travel has increased) one of the two brake circuits may have failed.

A greater braking pressure will be required, stopping distances will be longer and the braking behavior will change, particularly in curves.

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

#### Brake booster warning

The brake booster is monitored, in addition to the brake fluid level.

If the brake fluid warning lamp lights up after starting the engine, wait to drive until the required pressure for the brake booster is established and the warning light goes out.

If the brake fluid warning lamp in the instrument panel does not go out, there could be a defect in the brake booster.



#### Risk of accident due to altered braking behavior.

- Adjust your speed accordingly for longer braking distances, higher required pedal pressures, and altered braking behavior.
- Drive carefully to an authorized Porsche dealer. The brake system should be repaired immediatlely.

#### Brake pedal



#### Risk of an accident. Any obstruction of the brake pedal could increase the stopping distance.

▷ Always check the movement of the brake pedal before driving and make sure that it is not obstructed by a floor mat or any other object.

#### Note

In case one of the two brake circuits fails, increased pedal travel is required to bring your vehicle to a full stop.



#### To avoid overheating and premature wear of the brakes:

- ▷ Before descending a steep grade, reduce speed and shift the transmission into a lower gear to control speed.
- ▷ Do not "ride the brakes" by resting your foot on the pedal when not intending to apply brake pressure.
- ▷ Do not hold the pedal down too long or too
  - This could cause the brakes to get hot and not function properly.

#### **Brake booster**

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

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

#### Moisture or road salt

Moisture or road salt on brakes affects braking. When the vehicle is driven on salted roads for extended periods, the brakes should be washed down thoroughly about every 2 weeks. Brakes will dry after a few cautious brake applications.

# **!** Warning!

Driving through water may reduce the trac-

Moisture on brakes from road water, car wash, or coating of road salt may affect braking efficiency.

 Cautiously apply brakes to test brakes after such exposures.

#### **Brake wear**

Your car has excellent brakes, but they are still subject to wear. The rate at which they wear depends on how the brakes are used.

▶ Have the brake system inspected at the intervals recommended in your Maintenance Booklet.



#### **Warning light USA**



#### **Warning light Canada**

If the warning lights in the instrument panel and onboard computer stay on when the engine is running or come on while driving, the brake pads are worn, excessively.

▷ Do not continue to operate the vehicle. Have your authorized Porsche dealer inspect or replace the brake pads.

#### Brake pads

Wear on the brake pads and brake discs depends to a great extent on the driving style and the conditions of use and therefore cannot be expressed in actual miles on the road.

The high-performance brake system is designed for optimal braking effect at all speeds and temperatures.

Certain speeds, braking forces and ambient conditions (such as temperature and humidity) may cause "brake noises".

#### New brake pads or linings

New brake pads and brake discs have to be "broken in", and therefore only attain optimal friction when the car has covered several hundred miles or km.

The slightly reduced braking ability must be compensated for by pressing the brake pedal harder. This also applies whenever the brake pads and/or brake discs are replaced.

# **ABS Brake System** (Antilock Brake System)

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

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

**Steering**, vehicle remains steerable under all braking forces when ABS is engaged.

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

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

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

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

# Warning!

The increased control that is provided should not induce you to take greater risks with your safety. The limits dictated by the laws of physics cannot be overcome, even with ABS. The risk of accidents due to inappropriate speed cannot be reduced, even by the ABS. The driver bears the responsibility for all driving maneuvers.

- ▶ Adapt your driving style to the prevailing road and weather conditions.
- ▷ Obey all traffic laws.

Other vehicles not equipped with the ABS system may not be able to maintain control, especially on wet or poor road surfaces and thus may be more likely to impact you from behind.

▶ To minimize that risk, use your ABS system to increase your ability to maneuver to avoid dangerous situations and not merely to try to stop in the shortest distance possible.

#### **Operation of the ABS system**

A wheel speed sensor is mounted to each of the four wheels. If wheel lock-up of either of the front wheels or the rear wheels is sensed during braking, the brake pressure is adjusted automatically until the wheel no longer locks up.

The proper operation of ABS is perceived by the driver as a pulsating brake pedal in conjunction with audible noise and perhaps some vibration.

▷ If you experience these sensations while driving or a road surface with questionable traction, reduce vehicle speed appropriate for the prevailing road conditions.

The functional readiness of all the main electrical components of the ABS is checked by an electronic monitoring system both before and while you drive.



# **Warning light USA**



#### **Warning light Canada**

When the ignition is switched on the ABS warning light will light up while the system is electronically interrogated and goes out when the engine is started if the check is not yet complete. If the ABS warning lamp fails to go out, this indicates that ABS has been deactivated due to a fault. If the warning lights in the instrument panel and on-board computer light up while you are driving, this indicates that a fault has occurred. In both cases, normal braking, as in vehicles without ABS, is still retained.

The ABS system should, however, be examined at an authorized Porsche dealer immediately to prevent the occurrence of further faults.

▶ If the ABS system becomes inoperative, take vour vehicle to vour authorized Porsche dealer immediately.



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

▶ Use only tire makes and types tested by Porsche.

# **Traction Control (TC)**

TC counteracts the spinning of the driven wheels when moving off and accelerating.

Driving stability and traction are improved over the entire speed range.

# **!** Warning!

The increased control that is provided should not induce you to take greater risks with your safety. The limits dictated by the laws of physics cannot be overcome, even with TC. The risk of accidents due to inappropriate speed cannot be reduced, even by the TC. The driver bears the responsibility for all driving maneuvers.

- ▶ Adapt your driving style to the prevailing road and weather conditions.
- ▷ Obey all traffic laws.

## **Readiness for operation**

TC is switched on automatically every time you start the engine.

#### **Function**

#### **Engine torque control**

When the wheel rotation speed of the front and rear axles differs by more than a specified value (spinning), this is detected by TC system and engine output is automatically reduced.

#### Brake control

In addition to reducing engine power, TC brakes the spinning drive wheels.

**Simultaneous** spinning of both drive wheels does not result in brake intervention.

This means: driving stability is not moni-

The events below inform the driver of TC control operations and warn him to adapt his driving style to the road conditions:

- The information light in the instrument panel
- Hydraulic noises can be heard
- Reduced engine power



### **Switching off Traction Control**

▶ Press the "TC OFF" logo of the A button. TC is switched off after a short delay. With TC switched off, the TC OFF warning light on the instrument panel lights up.

#### Note on operation

TC cannot be switched off during a controlled braking process (information light on).

#### The TC should always be switched on during "normal" driving. This is particularly the case when the road is wet.

However, it can be of advantage to switch off TC temporarily in exceptional situations:

- On a loose surface or in deep snow,
- When "rocking the vehicle free",
- When using snow chains.

#### **Switching on Traction Control again**

▶ Press the "TC OFF" logo of the **A** button. TC is switched on after a short delay.

#### Note on operation

TC cannot be switched on again during a controlled braking process.



#### **Information light**

- The TC information light in the instrument panel lights up for a lamp check when the ignition is switched on.
- The light indicates a control operation.



#### **Warning light**

- The warning light in the instrument panel lights up for a lamp check when the ignition is switched on.
- The light indicates that TC is deactivated.
- The lights in the instrument panel and in the onboard computer indicate a defect. The TC is out of order. The fault should be remedied immediately at an authorized Porsche dealer.

#### **Towing**

▶ Please observe the chapter "TOWING, RECOV-ERY" on Page 172.

#### **Checks on test stands**

Handbrake tests on the brake test stand must only be carried out with the ignition switched off.

# **Retractable rear wing**



#### Risk of accident. If the rear wing does not extend, driving stability will be adversely affected.

- ▶ Adapt your driving style and speed to the changed driving conditions.
- ▶ Have the fault remedied at an authorized Porsche dealer.
- ▷ Do not exceed the posted legal speed limit.

#### Serious injuries may occur from crushing and pinching at all moving parts in the area of the rear wing.

▶ Ensure that no one can be injured and no objects can be jammed by the extension or retraction of the rear wing.

#### Risk of damage to rear wing.

- ▷ Do not pull or push the vehicle using the rear wing.
- ▷ Do not place objects on the rear wing.



#### Manual control

When the ignition is on, the rear wing can be extended and retracted manually using the button A in the center console.

#### Extension

▶ Press upper half of the button briefly. The rear wing extends to its final position.

#### Retraction

▶ Press and hold lower half of the button until the rear wing has reached its final position.

#### **Automatic control**

The rear wing extends at approx. 75 mph/ 120 km/h and retracts at approx. 50 mph/ 80 km/h.

If high engine power is used over longer periods of time, the retraction of the rear wing is suppressed, so that when the car is driven in a sporty manner, the rear wing is not constantly extending and retracting.

When the vehicle is driven at moderates speeds afterwards, the rear wing can remain extended for up to 15 minutes, even after the vehicle is parked.

If the vehicle is driven with even lower demands on the engine, the rear wing will retract and extend dependent on the speed.

If automatic control fails, the warning light illuminates. The rear wing must be extended manually by pressing button **A** when the vehicle is stationary.



## **Warning light**

The warning light in the instrument panel lights up for a lamp check when the ignition is switched on.

The warning lights on the instrument panel and in the on-board computer come on if the rear wing does not extend or does not reach its final position at more than 75 mph/120 km.



- **A** Orientation light switch **B** Orientation light
- C Interior light switch

# **Interior lights**

▶ Please observe the chapter "LOAD SWITCH-OFF AFTER TWO HOURS OR FIVE DAYS" on Page 156.

#### **Interior light**

#### Switching off

▶ Press left half of switch.

#### Switching to continuous illumination

▶ Press right half of switch.

#### Switching on and off automatically

▶ Move switch to center position.

The lights are **switched on** when a door is unlocked or opened or when the ignition key is withdrawn from the ignition lock.

The lights are switched off with a delay of approx. 30 seconds after the door is closed. The light goes out immediately as soon as the ignition key is inserted in the ignition lock or the vehicle is locked.

#### **Orientation light**

A light-emitting diode and in the interior light improves your orientation inside the vehicle when it is dark.

The light-emitting diode is switched on when the vehicle is unlocked and switched off again when the vehicle is locked.

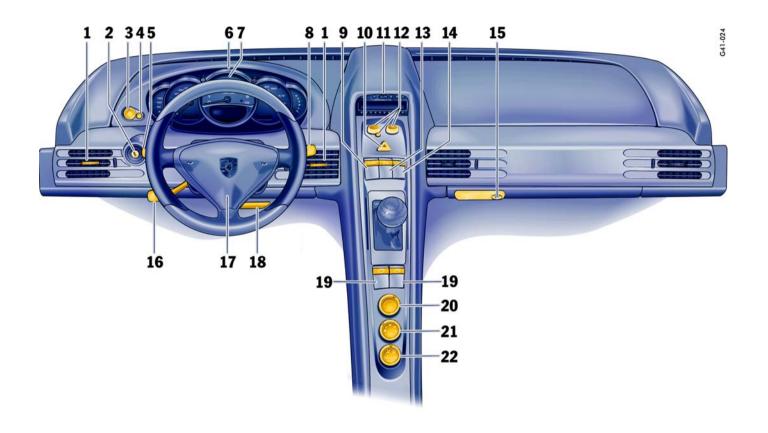
# Changing the brightness of the light-emitting

▶ Press switch **A** with a pointed object (such as a ball-point pen). The brightness changes.

# **Operation, Instruments**

- 1 Vents
- 2 Ignition/starter switch with steering lock
- 3 Light switch
- 4 Indicator light for switched on low beam/high beam
- 5 Turn signals/ headlight dimmer/flasher lever
- 6 hands-free microphone for telephone
- 7 Instrument panel
- 8 Windshield wiper/washer lever
- 9 Traction Control (TC) button
- 10 Emergency flasher switch
- 11 Porsche Online Pro control panel
- 12 Control and button for Porsche Online Pro

- 13 Rear wing button
- 14 Central locking button, Readiness display for alarm system
- 15 Glove compartment with socket
- 16 Operating lever for on-board computer
- 17 Horn
- 18 Locking lever for steering-wheel adjustment
- 19 Power window buttons
- 20 Knob for temperature, Air conditioning system button
- 21 Knob for air quantity, Button for defrosting the windshield
- 22 Knob for air distribution, Circulating-air mode button





# Ignition/Starter Switch with antitheft Steering Lock

- ▶ For your safety, fasten safety belts.
- ▶ Please observe the chapter "IMMOBILIZER" on Page 19.

# Before starting the engine

- ▷ Apply the handbrake.
- Move the gearshift lever into neutral.
   The clutch pedal must be depressed fully before the starter will engage.

# **Switch position 0**

The ignition key can be withdrawn in this position only.

#### The steering is locked when the key is withdrawn.

▷ Engage the steering lock by moving the steering wheel to the left or right. Turn the steering wheel to the locking position before you switch off the engine so that you don't have to exert yourself when locking or unlocking the steering.

#### **Switch position 1**

Ignition is on.

All electrical equipment can be switched on. The warning lights light up for a lamp check. Please note the description of the individual warning lights.

▶ When turning the key to position **1**, relieve the steering lock with a slight steering movement.

#### Note

To conserve battery power at low rpm (traffic jams, town driving etc.), switch off all electrical consumers which are not needed at that moment.

#### **Switch position 2**

#### Starting the engine

▶ Turn the key from position **1** to position **2**.

#### The clutch pedal must be depressed fully before the starter will engage.

▷ As soon as the engine starts, release the ignition kev. It will spring back to position "1".

If the engine does not start at the first time or stalls at any time, the key must be returned to position **0**.

When the engine is running, the warning lights should go off. If a light does not go off, take appropriate action as indicated in this manual.

#### **Switching engine off**

▶ Turn the ignition key from position **1** to position **0**.



#### Risk of an accident. The steering wheel will lock and will cause loss of steering.

- ▶ Never remove key from the ignition lock or turn the key off while the vehicle is moving.
- ignition key from the ignition lock. Please observe the chapter "BATTERY" on Page 161.
- ▶ Turn the steering wheel until the steering lock is engaged.

#### Gong

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

# **Starting Procedures**

▶ Please observe the chapter "IMMOBILIZER" on Page 19.



Serious injury or death may result if you are involved in a collision without having fastened the safety belts.

▶ Fasten safety belts before driving away.

#### **Before starting the engine**

- ▶ Apply the handbrake.
- ▶ Move the gearshift lever into neutral. The clutch pedal must be depressed fully before the starter will engage.

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

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

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

If the engine fails to start after 10 or 15 seconds of cranking:

- ▶ Wait about 10 seconds before engaging the starter again.
- ▷ Do not let the engine idle to warm up.

first 5 minutes.

When starting the engine, be ready to drive immediately. Drive vehicle at moderate speeds and avoid

engine speeds above 4,200 rpm during the

# 

Engine exhaust fumes have many components which you can smell. They also contain carbon monoxide (CO), which is a colorless and odorless gas.

Carbon monoxide can cause unconsciousness and even death if inhaled.

▶ Never start or let the engine run in an enclosed, unventilated area. It is not recommended to sit in your car for prolonged periods with the engine on and the car not moving.

An unattended vehicle with a running engine is potentially hazardous.

If warning lights should come on to indicate improper operation, they would go unnoticed.

▶ Never leave the engine idling unattended.

#### Danger of fire.

- ▷ Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.
- ▶ If your car catches on fire for any reason, call the fire department. Do not endanger your life by attempting to put out the fire.

# **Stopping Engine**

- ▶ Turn key back to position **0**.
- ▷ Do not stop engine immediately after hard or extended driving. Keep engine running at increased idle for about two minutes to prevent excessive heat build-up before turning off engine.
- ignition key from the ignition lock.
- ▶ Make sure that when you leave the car, even briefly, you have withdrawn the ignition key.
- ▶ Engage the steering lock by moving the steering wheel to the left or right. Turn the steering wheel to the locking position before you switch off the engine so that you don't have to exert yourself when locking or unlocking the steering.



#### Danger of injury. Hot engine compartment components can burn skin on contact.

▶ Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.

#### **Engine-compartment blowers.** radiator fans

The radiator and radiator fans are in the front of the car and in the engine compartment.

The engine-compartment blowers are mounted in the engine compartment.



#### Risk of injury.

After the engine is switched off, the enginecompartment and coolant temperatures are monitored for approx. 20 minutes. During this period, and depending on temperature, the engine-compartment blowers and radiator fans may continue to run or start to run.

Carry out work in these areas only with the engine off, the ignition off, and exercise extreme caution.

#### Automatic garage door

The ignition system in your Porsche may interfere with your electronically operated garage door.

- ▶ To check this, drive your Porsche close to the garage door. Make sure not to interfere with the operating range of the door.
- ▶ Run the engine at different speeds.

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

#### **Instrument Panel USA Models**

#### Also refer to the corresponding chapters in the Owner's Manual.

- 1 Engine oil temperature gauge
- 2 Speedometer with analogue display
- 3 Speedometer with digital display
- 4 Tire pressure (RDK) warning light
- 5 Adjustment button for instrument illumination and trip counter
- 6 Tachometer
- 7 Turn signal indicator light, left
- 8 High beam indicator light
- 9 On-board computer
- 10 Turn signal indicator light, right
- 11 Light sensor for instrument illumination
- 12 Adjustment button for change-over between kilometers/miles
- 13 Clock
- 14 Cooling system Temperature gauge, warning light
- 15 Fuel Level gauge, warning light
- 16 Engine oil pressure gauge

#### **Warning lights/indicator lights**

- A Washer fluid level warning light
- B Check engine warning light
- C Traction Control information light
- D Traction Control warning light
- E ABS warning light
- F Brake fluid level. Brake distribution warning light Brake booster warning light
- G Parking brake warning light
- H Brake pad wear warning light
- Engine oil pressure warning light
- J Battery warning light
- K Safety belt warning light
- L Airbag warning light
- M Rear wing warning light
- N Front lid/Engine compartment lid warning light

#### When the ignition is switched on, the warning lights light up for a bulb check.

#### Note

Warnings that have been given are stored in the appropriate control unit memory and can be read out at an authorized Porsche dealer.

This information can help to warn you about situations which may be hazardous to you or your car.



#### **Instrument Panel Canada Models**

#### Also refer to the corresponding chapters in the Owner's Manual.

- 1 Engine oil temperature gauge
- 2 Speedometer with analogue display
- 3 Speedometer with digital display
- 4 Tire pressure (RDK) warning light
- 5 Adjustment button for instrument illumination and trip counter
- 6 Tachometer
- 7 Turn signal indicator light, left
- 8 High beam indicator light
- 9 On-board computer
- 10 Turn signal indicator light, right
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This information can help to warn you about situations which may be hazardous to you or your car.

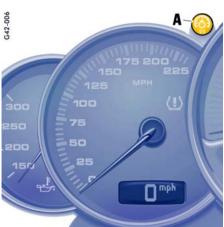




# **Engine Oil Temperature** Gauge

A warning message will appear in the on-board computer if the engine oil temperature is too high.

▶ Reduce speed and engine load immediately.



A - Adjustment button for instrument illumination and trip counter

# Instrument Illumination

The illumination is automatically adjusted to the ambient brightness by the light sensor in the tachometer.

In addition, when the car lights are switched on, the instrument and switch symbol brightness can be manually adjusted.

# / Warning!

#### Risk of an accident, personal injury and loss of control.

- ▷ Do not reach through the steering-wheel spokes while driving.
- ▷ In the event of a sudden turn or airbag deployment, serious personal injury could result if hand is positioned through steering wheel spokes.



#### **Dimming instrument illumination**

▶ Turn adjustment button **A** in the appropriate direction and hold it until the desired brightness has been reached.

The chosen level of brightness is indicated by a bar display in the display field of the on-board computer.

# **Trip Odometer**



#### Risk of an accident, personal injury and loss of control.

- ▷ Do not reach through the steering-wheel spokes while driving.
- ▷ In the event of a sudden turn or airbag deployment, serious personal injury could result if hand is positioned through steering wheel spokes.

#### **Resetting to zero**

- ▶ Press adjustment button **A** for approximately one second or
- ▶ Reset the distance in the "SET" menu of the onboard computer.
- ▶ Please observe the chapter "ON-BOARD COM-PUTER (BC)" on Page 65.

After exceeding 6,213 miles or 9,999 kilometers, the counter returns to "0".



A - Adjustment button for change-over between kilometers/miles

# **Speedometer**

The digital speedometer is integrated in the pointer instrument.

The indication changes from mph to km/h when the units are changed from miles to kilometers.

# **Changing over between Miles / Kilometers**

You can use adjustment button **A** to change the units of the distance and speed displays in the onboard computer and digital tachometer.

# **!** Warning!

#### Risk of an accident, personal injury and loss of control.

- ▷ Do not reach through the steering-wheel spokes while driving.
- ▶ In the event of a sudden turn or airbag deployment, serious personal injury could result if hand is positioned through steering wheel spokes.

#### Switching between units

▶ With the ignition on, hold adjustment button A turned to the left for approx. 5 seconds.

#### Note

The units of the distance and speed displays can also be changed in the "SET" menu of the onboard computer.



#### **Tachometer**

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

The beginning of the red marks at the right end of the scale indicates the maximum permissible engine rpm.

A speed limiter prevents the engine from being overrevved during acceleration. Before reaching this area, the next higher gear should be select-

Shift to the next **lower** gear when the engine rpm drops below 1,500 rpm.



#### To avoid severe engine damage.

▷ Always observe the engine rpm before downshifting to a lower gear, so you do not exceed the maximum engine rpm.

# **Turn Signal Indicator Light**

Flashes in synchronism with the turn signals.

Left arrow – left turn signals Right arrow – right turn signals

▶ If the flash frequency of the display becomes noticeably faster, check the operation of the turn signals.



# **High Beam**

#### **Indicator light**

Lights when high beam or headlight flasher is switched on.

The indicator light goes out when the high beams are switched off.



# **Cooling System**

## **Temperature gauge (ignition on)**

USA: Display in °F Canada: Display in °C

Pointer to the left – engine cold

▷ Avoid high engine speeds and heavy engine loading.

Pointer in the middle - normal operating temperature

The pointer may move up to the red area when engine is heavily loaded and outside temperature is high, but should return to "normal" when engine load is reduced.

#### Warning light "A"

If the **coolant temperature** is too high, the warning light comes on.

Additionally, a warning is displayed in the on-board computer.

- Pull off the road, turn off the engine and allow to cool.
- ▶ Check radiator and air passages in front end of car for obstructions.
- ▷ Check coolant level. If necessary, add coolant and have fault remedied at an authorized Porsche dealer. Please observe the chapter "COOLANT LEVEL" on Page 117.

#### Note

To prevent excessive temperatures, the coolingair passages must not be restricted by coverings (e.g. films, "stone guards").

If the **coolant level** is too low, the warning light flashes.

Additionally, a warning is displayed in the on-board computer.

- **▶** Switch engine off and allow to cool.
- ▷ Add coolant.
- ▶ Have the cause of the fault remedied at an authorized Porsche dealer. Please observe the chapter "COOLANT LEVEL" on Page 117.



#### **/!** \ Caution!

#### Risk of engine damage.

- ▶ If the warning lights come on even though coolant level is correct, do not continue driving.
- ▶ Have the fault remedied at the nearest authorized Porsche dealer.

## **Engine compartment blower fan**

In addition, this warning light flashes to indicate a fault in the engine compartment blower fan.

authorized Porsche dealer.





# **Fuel**

# Level gauge

When the ignition is on the fuel level is displayed.

▶ Please observe the chapter "CAPACITIES" on Page 183.

If the vehicle's inclination changes (e.g. going uphill/downhill) or is subject to high lateral acceleration (e.g. race circuit), deviations in the indication may occur.

#### Note

If the tank is near empty and you top up with only a small quantity of fuel, this cannot be registered by the level gauge and calculation of the range remaining is impossible.

# Warning light "A"

When the engine is running, the warning light of the level gauge **lights up** if less than approx. 3.6 U.S. gallons (13.5 liters) of fuel remains in the tank or the range on remaining fuel falls below approx. 30 miles (50 km).

Additionally, a warning is displayed in the on-board computer.

▶ Fill up at the next opportunity.

#### /!\ Caution!

#### To prevent damage to the emission control system and engine.

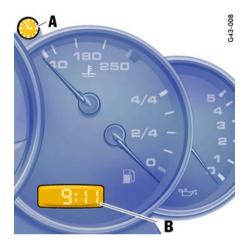
- ▶ Never drive the tank completely out of fuel.
- ▷ Avoid high cornering speeds after the warning lights have come on.
- ▶ Please observe the chapter "EMISSION CON-TROL SYSTEM" on Page 128.

If the level gauge warning light flashes, there has been a system fault.

Additionally, a warning is displayed in the on-board computer.

There will then be no reserve warning.

▷ To remedy the fault, go to an authorized Porsche dealer.



A - Adjustment button for clock B - Clock

# Clock

The **clock** is blanked out approximately four minutes after the ignition is switched off or when the car is locked.

#### **Setting the time**



#### Risk of an accident and loss of control.

- ▷ Do not reach through the steering-wheel spokes while driving.
- ▷ In the event of a sudden turn or airbag deployment, serious personal injury could result if hand is positioned through steering wheel spokes.

#### **Setting hours**

- ▶ Press adjustment button **A** for about one sec-Hour display flashes.
- ▶ Turn button in the appropriate direction: clockwise - increase hours figure counter-clockwise - decrease hours figure.

Adjustment in hours – turn button briefly Fast adjustment (display cycles) turn and hold button.

#### **Setting minutes**

- ▶ Press adjustment button again. Minutes display flashes.
- ▷ Set by rotating as in hours mode.

#### Leaving adjustment mode

Automatically after one minute **or**:

▶ Press adjustment button again.

When adjustment mode is deliberately left by pressing the button, the time begins precisely to the second.

#### Note

The time mode can be changed between 12h and 24h via the on-board computer.



# **Engine Oil Pressure**

# **℃** Gauge

With a warmed-up engine and at a speed of 3,000 rpm, the oil pressure should be at least 3 bar.

If the oil pressure drops abruptly and the warning lights in the instrument panel and in the on-board computer come on while the engine is running or while driving:

▶ Immediately stop in a suitable place and switch engine off. Measures see "Warning light".



#### **Warning light**

The warning light in the instrument panel lights up when ignition is switched on and must go out when engine is running.

If the warning lights in the instrument panel and in the on-board computer come on with the engine running or while driving:

- ▶ Immediately stop in a suitable place.
- Switch off the engine.
- ▷ Check whether there is an obvious oil leak on or under the car.
- ▶ If no oil leak can be detected: Measure the oil level using the on-board computer with the engine idling. Please observe the chapter "ON-BOARD COM-PUTER (BC)" on Page 65.
- ▷ Add engine oil if nescessary. Please observe the chapter "ENGINE OIL LEV-EL" on Page 119.



#### Risk of engine damage.

- ▷ Do not continue driving if there is an obvious oil
- ▷ Do not continue driving if the warning lights come on even though oil level is correct.
- ▶ Have the fault remedied at the nearest authorized Porsche dealer.

## **Battery**



#### **Warning light**

The warning light in the instrument panel comes on when ignition is switched on and must go off when engine is running.

#### If the warning lights in the instrument panel and on-board computer come on while the engine is running or while driving:

▷ Stop the car in a safe place and stop the engine.

#### Possible causes

- Defect in the battery charging system.
- Broken drive belt.



#### Risk of engine damage. A broken drive belt means coolant pump function will stop.

- ▷ Do not continue driving.
- ▶ Have the fault remedied at the nearest authorized Porsche dealer.



# **Check Engine Warning Light**

The warning light in the instrument panel comes on when the ignition is first turned on and remains on briefly as a bulb check. If the light does not come on, have the bulb replaced promptly.

If the warning lights in the instrument panel and onboard computer come on and remain on while driving, it suggests:

- a potential engine control problem and the need for system service or
- an improperly fastened fuel tank cap or
- refuelling with engine running.

Although the vehicle is usually driveable and will not require towing, see your dealer for service immediately.



If the Check engine light in the instrument panel is flashing, severe catalytic converter damage and power loss will soon occur. Prolonged driving with the Check engine light on could cause damage to the emission control system. It also could affect fuel economy and driveability.

rized Porsche dealer immediately.



# **On-Board Computer (BC)**

# **Display field**

The display field is beneath the tachometer.

# **Readiness for operation**

- With ignition switched on,
- with engine running.



# **Operation, controls**

It is not possible to describe all details of the onboard computer functions in this Owner's Manual. However, the examples will quickly familiarize you with the functional principle and help you to navigate through the menu structure.

You can restore the factory default settings at any time by using the "SET" menu.

#### **Operating lever**

The on-board computer is operated with the lower left lever on the steering column.

#### Selecting functions of the on-board computer

Push lever up 1 or down 2.

#### Confirming selection (Enter)

Push lever forward 3.

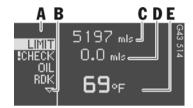
#### Moving back one or several selection levels

▶ Pull the lever back **4** once or several times.

#### Note

You can always return to the basic menu by pulling the operating lever several times.

#### **Functions and display possibilities**





- A Selection field
- **B** Continuation arrow symbol
- C Top display
- D Central display
- E On-board computer display

#### Basic setting

- Top display: Odometer
- Central display: Trip odometer

You can change both displays to suit your requirements by using the "SET" menu.

# Calling on-board computer functions in display "E"

 Push operating lever up or down (selection field **A** must be switched off).

The following displays can be called step by step:

- Outside temperature (°F),
- Average speed (Ømph),
- Average fuel consumption (∅mpg),
- Range on remaining fuel (miles ⇒ ≥ ),
- Tire pressure

#### Canadian vehicles

The units in the on-board computer are displayed in kilometers, liters and °C.

The values "Trip odometer", "Average speed" and "Average consumption" can be reset to zero using the "BC" menu.

#### Note

Pulling the operating lever to the rear **4** takes you directly from a value which can be reset to the "BC" menu.

#### Switching selection field "A" on or off

▶ Push operating lever forward or back.

#### Arrow symbol "B" for continuation

Arrow symbol 🔽

Push operating lever down in order to continue the menu.

#### Arrow symbol ...

Push operating lever up in order to continue the menu.

#### "LIMIT" **Acoustic warning signal for** speed limit

The acoustic warning signal can be activated for speeds above 6 mph (10 km/h).

The signal sounds if the preset speed is exceeded.

For the signal to sound again, the driving speed must fall below the preset speed by at least 3 mph (5 km/h).

#### Switching on selection field "A"

▶ Push operating lever forward.

#### Setting the speed

▷ Select "LIMIT" with the operating lever.



▶ Push operating lever forward.



#### Option 1: Accept current speed

▶ Push operating lever forward.



The acoustic warning signal is activated for the current speed.

Display:

#### Option 2: Preset speed

- ▷ Select "LIMIT activated" with the operating lever.
  - not activated activated
- ▶ Press the operating lever forward if the "not activated" display appears.



▶ Use the operating lever to select "mph +" or "mph -".



▶ Push operating lever forward until the desired speed is reached.

The acoustic warning signal is activated for the desired speed.



#### Switching the acoustic warning signal off

- ▷ Select "LIMIT activated" with the operating lever.
- ▶ Push operating lever forward.

Display:  $\square$ 

 $\triangleright$   $\triangleright$   $\triangleright$ 

# "CHECK" Warning messages

#### Switching on selection field "A"

▶ Push operating lever forward.

#### Calling warning messages

▷ Select "CHECK" with the operating lever.



▶ Push operating lever forward.



Any existing warning messages can be called using the operating lever.

You also can call warning messages which were acknowledged during the journey (only until the next time the ignition is switched on).

▶ Push operating lever forward.



# "OIL" Display and measurement of the engine oil level



#### Risk of engine damage.

- ▶ Regularly check the oil level before refuelling.
- Do not allow the oil level to fall below the minimum mark.

#### Conditions for measuring the oil level

- 1. Engine idling.
- 2. Engine is at operating temperature.
- 3. Vehicle is level.
- 4. Vehicle stationary.

#### Switching on selection field "A"

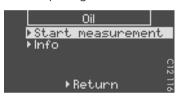
▶ Push operating lever forward.

#### Initiating oil level measurement

▷ Select "OIL" with the operating lever.



▶ Push operating lever forward.



Push operating lever forward.
 Measurement is started.



The waiting time for oil level measurement is indicated by a time display and "cycling" segments of the oil level display.



Once the measurement has been completed, you can read off the engine oil level on the segment display.

If the oil level has fallen below the min. mark, the segment below the min. mark flashes.

The difference between the min. and max. marks on the segment display is approx. 2 liters (2.13 quarts).

One segment of the display corresponds to a quantity of approx. 0.3 liters (0.31 quart).

▶ Top up engine oil.
Never add more engine oil than required

to reach the max. mark.

▷ Please observe the chapter "ENGINE OIL LEV-

# EL" on Page 119.

#### Info

The "Info" function allows you to call the prerequisites for oil level measurement.

#### **Failure**

A failure of the oil level display is indicated by a warning message in the on-board computer.

#### Display "Check oil level"

The computer display "Check oil level" is an additional reminder to you to check the oil level.

The display depends on the distance travelled and the operating conditions, and does not indicate whether or not the oil level is correct.

#### "BC" **Calling and resetting on-board** computer functions

#### Switching on selection field "A"

▶ Push operating lever forward.

#### Example: Resetting average consumption

▷ Select "BC" with the operating lever.



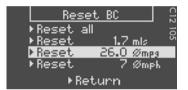
▶ Push operating lever forward.



▷ Select "Ømpg" with the operating lever.



▶ Push operating lever forward.



▶ Push operating lever forward.



The average consumption is reset to "- -.- Ømpg".

#### ..RDK" Tire pressure monitoring system

The tire pressure monitoring system continuously monitors tire pressure and tire temperature on all four wheels and warns the driver promptly when the tire pressure is too low.

The display as well as the settings for tire pressure monitoring are done on the on-board computer.

However the tire pressure must be adjusted manually on the wheel.

The tire pressures to be monitored for **public roads** are permanently set in the tire pressure monitoring system and cannot be changed.

▶ The driver is solely responsible for inflating the tires correctly.

The tire pressure monitoring system offers the following functions:

- Display of tire pressure when driving
- Display of tire pressures to be corrected
- Change the tire pressures to be monitored for racing circuit use
- Tire pressure warnings in two stages

# \ Warning!

Despite the advantages offered by the tire pressure monitoring system, it is still the driver's responsibility to update the corresponding settings in the on-board computer and maintain the pressure in the tires. Low tire pressure reduces the road safety of the vehicle and destroys the tires and wheel.

- ▶ When a flat tire has been displayed, immediately stop in a suitable place and check the tires for damage. If necessary remedy the damages with a tire repair kit.
- ▷ Do not by any means continue to drive with defective tires.
- ▶ Defective tires must be immediately replaced by an authorized Porsche dealer. Tire repairs are not permissible under any circumstances.
- ▷ Sealing the tire with the tire repair kit is only an emergency repair. The maximum permitted speed is 80 km/h (50 mph).
- ▷ Do not drive with tires whose tire pressure drops again in a short period of time. In cases of doubt, have tires checked by an authorized Porsche dealer.

- ▶ If the tire pressure monitoring system is defective (e.g. defective wheel transmitter), contact an authorized Porsche dealer immediately and have the damages repaired.
  - The tire pressure will not be monitored by a defective tire pressure monitoring system.
- ▶ Use only the pressure differences shown in the Pressure Info display or from the corresponding message when correcting the tire pressure.
- ▶ Tires lose air over time even without a tire defect being present. The tire pressure monitoring system will then issue a message or warning.
  - Correct the tire pressure at the next opportuni-
- ▶ Tire pressure monitoring gives a warning about tire damages due to insufficient tire pressure as well as about a gradual loss of pressure due to foreign objects.
  - The tire pressure monitoring system cannot warn vou about tire damages occurring suddenly (e.g. flat tire due to external effects).



#### Tire pressure function of the on-board computer

The on-board computer function tire pres**sure** displays the tire pressures dependent on temperature in the four wheels.

You can watch the tire pressure rise as the temperature increases while driving.

#### The display is only for information.

▶ Under no circumstances should the tire pressures be changed based on this display.

#### Calling up on-board computer function tire pressure

▶ Push operating lever up or down until the **on**board computer function tire pressure ap-

(selection field **A** must be **switched off**.



#### Pressure Info in menu tire pressure

In accordance with physical principles, the air pressure changes as the temperature changes. The tire pressure increases or decreases by around 1.5 psi (0.1 bar) for every 18°F (10°C) change in temperature.

The tire pressure monitoring system takes this relationship between tire pressure and temperature into account.

#### You can read the tire pressures to be corrected in this display.

The tire pressure to be corrected is indicated on the displayed wheel.

Example: If "-2 psi" is displayed in the Pressure Info menu, 2 psi must be added to the tires.

#### Note

The Tire pressure menu can only be called up when the vehicle is stationary.

#### Calling up "Pressure info" display

- ▶ Push operating lever forward to switch on selection field A
- ▷ Select "RDK" with the operating lever.
- ▶ Push operating lever forward. The display changes to the Tire pressure menu.
- Select "Pressure info" with the operating lever.
- ▶ Push operating lever forward.

### Race circuit

Pressures differing from public road mode can be set and monitored for driving on the race circuit.

### Setting the tire pressures for the race circuit

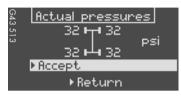
- 1. Push operating lever forward in order to switch on the selection field **A**.
- 2. Select "RDK" with the operating lever.



- 3. Push operating lever forward. The display changes to the Tire pressure menu.
- 4. Select "Race circuit" with the operating lever.



5. Push operating lever forward. Current tire pressures are displayed.



6. Now set the desired tire pressures for the race circuit on the tires.

After setting the tire pressure on the wheel, it can take up to 1 to 2 minutes until the new pressure specifications appear updated on the on-board computer.

### Note:

The desired pressures must not:

- fall below 25 psi (1.7 bar) for each tire or
- exceed a 6 psi (0.4 bar) pressure difference on both wheels of an axle.

Otherwise a message appears on the on-board computer and the new pressures will not be accepted. In this event, the pressure in the tires to be monitored must be set again.

- 7. When all the desired tire pressures have been set on the wheels and the RDK (tire pressure monitoring system) actual pressures appear in the display, select "Accept" with the operating lever.
- 8. Push the operating lever forward

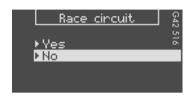


The menu changes to "New required pressures" in the display. Until the current pressures are displayed. " -.- " appears for approx. 2 minutes.

- 9. Select "Return" with the operating lever.
- 10. Push operating lever forward.

The display leaves the Tire pressure menu and returns to the tire pressure function in the on-board computer.

▷ ▷



### Resetting to public road mode

When race circuit mode is in use, the prompt "Race circuit mode ves/no" appears after switching on the ignition on the on-board computer:

### Yes:

Selecting "Yes" retains the set tire pressures for monitoring when driving on the race circuit.

### No:

Selecting "No" resets the tire pressures to be monitored to public road mode. Until the current pressures are displayed, "-,-" appears for approx. 2 minutes.

▶ After changing to public road mode, call "Pressure info" in the Tire pressure menu and correct the tire pressures according to these specifications.

### Tire pressure warnings

The tire pressure monitoring system warns about loss in pressure in two stages, depending on the amount of pressure loss:

Stage 1 – Tire pressure too low

Stage 2 – Flat tire

Tire pressure monitoring gives a warning about loss of pressure both in public road mode as well as in race circuit mode.



### Stage 1 - Tire pressure too low (3 to 6 psi (0.2 to 0.4 bar ) loss in pressure)

The pressure in the tires is too low by 3 to 6 psi (0.2 to 0.4 bar).

Driving with insufficient tire pressure reduces the road safety of the vehicle and destroys the tire and wheel.

▶ The tire pressure warning contains the affected tire with the tire pressure to be added. Correct the tire pressure at the next opportunity.

This tire pressure warning appears with vehicle stopped and can be acknowledged.

The tire pressure warning light in the instrument panel goes out when the tire pressure has been corrected.



### Stage 2 - Attention, flat tire (from 6 psi (0.4 bar) loss in pressure)

The pressure in the tires has dropped by more than 6 psi (0.4 bar). This significant pressure loss is a danger to road safety.

▶ When the tire pressure warning has appeared on the on-board computer, stop immediately at a suitable location. Check the tires for signs of damage. If necessary, fill in the sealant of the tire repair kit and fill up the tire again.

This tire pressure warning appears when driving and can be acknowledged.

The tire pressure warning light in the instrument panel goes out when the tire pressure has been corrected.

### Note

For a short time after changing a wheel or replacing a wheel transmitter, a warning appears when pressure loss is detected without wheel position and tire pressure specifications.

- ▶ Manually check the tire pressure on all wheels and fill the tires.
- ▶ Please observe the chapter "WARNINGS IN THE INSTRUMENT PANEL AND IN THE ON-BOARD COMPUTER" on Page 81.

### **Changing a wheel and replacing tires**

After changing a wheel, the tire pressure monitoring system requires some time for the current tire pressure specifications to appear in the tire pressure function of the on-board computer.

After mounting new wheels, the tire pressures of the previously mounted wheels are displayed.

As soon as the tire pressure monitoring system detects newly installed wheel transmitters, "-,-" appears on the on-board computer instead of the pressure specifications.

If the tire pressure monitoring system then detects the new positions of the wheel transmitters, the new pressure specifications appear in the Tire pressure menu and in the tire pressure function of the on-board computer.

 $\triangleright$   $\triangleright$   $\triangleright$ 

# **Warning light**

The warning light in the speedometer lights up:

- When a loss in pressure has been detected.
- If race circuit mode is set.
- If the tire pressure monitoring system is faulty.

The tire pressure warning light in the instrument panel goes out when the cause of the fault has been rectified.

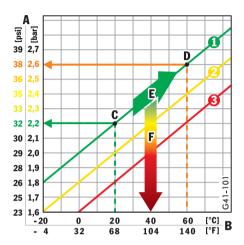
### No monitoring

In the event of faults the tire pressure monitoring cannot monitor the tire pressure.

The warning light on the instrument panel and a message on the on-board computer light up.

Monitoring is not active when:

- there are defects in the tire pressure monitoring system,
- wheel transmitters for tire pressure monitoring are not present.
- temporarily after changing a wheel,
- too many wheel transmitters are detected,
- there is external interference by other radio sources, e.g. wireless headphones,
- tire temperatures are too high.
- ▶ Please observe the chapter "WARNINGS IN THE INSTRUMENT PANEL AND IN THE ON-BOARD COMPUTER" on Page 81.



### Pressure increase as the result of temperature increase

- A Tire pressure
- B Tire temperature
- C Tire pressure for cold tires
- D Tire pressure for hot tires
- E Pressure increase as the result of temperature increase
- F Pressure drop in faulty/leaking tires
- 1. Required-pressure line
- 2. Stage 1 (from -3 to -6 psi (-0.2 bar to -0.4 bar ))
- 3. Stage 2 (from -6 psi (-0.4 bar))

### **Tire pressure specifications**

Information on tire pressure for public roads can also be found in this Owner Manual on page 3 or on the tire-pressure plate in the filler flap. These values apply to cold tires at 68°F (20°C).

- ▷ Only use the pressure specifications from the "Pressure info" display in the Tire pressure menu or from the respective tire pressure warning to correct the tire pressure.
- ▶ Please observe the chapter "TIRES/WHEELS" on Page 145.

# "SET" **Basic setting of on-board computer**

### Switching on selection field "A"

▶ Push operating lever forward.

### Changing the basic setting of the on-board computer

▷ Select "SET" with the operating lever.



▶ Push operating lever forward.

### Reset

 Reset all, Reset trip counter, Reset average consumption, Reset average speed

### Speedometer: km/mls

Change over between kilometers and miles

### Display (Individual combination of upper and central lines of the on-board computer)

- Changing top display

Total mileage Trip counter Outside temperature Range on remaining fuel Average speed Average fuel consumption

### - Changing central display

Total mileage Trip counter Outside temperature Range on remaining fuel Average speed Average fuel consumption

### Basic setting

 Restore the basic setting of the on-board computer

### Language

Select language version

### Consumption

 Select unit for fuel consumption: I/100 km, mls/gal (USA), mpg (UK), km/l

### Temperature

 Select unit for temperature: °C, °F

### 12/24h mode

 Select time mode: 12h (small squares on the left side of the time display for AM/PM), 24h

### "0FF" **On-board computer display**

### Switching on selection field "A"

▶ Push operating lever forward.

### Switching on-board computer display off

▷ Select "OFF" with the operating lever.



▶ Push operating lever forward. Display is switched off.

### Switching on-board computer display on again

▶ Push operating lever in any direction.

### General information regarding the onboard computer functions

### Range on remaining fuel

The range on remaining fuel is continuously recomputed while driving based on fuel level, current consumption and average consumption.

The more the fuel level falls, the more spontaneously the display reacts. For this reason, range on remaining fuel is not displayed if less than 15 kilometers (9 miles).

If the vehicle's inclination changes while driving or refuelling, incorrect range information may temporarily be given.

### Note

If the tank is nearly empty and you add only a small quantity of fuel, this cannot be used to calculate the range on remaining fuel.

### Average consumption and average speed

The displayed values are based on the distance travelled since the last reset to "zero".

You can set the starting time for a measurement before or during the trip.

Switching the ignition off does not reset the measurements. Values can thus be collected over long periods.

Disconnecting the car battery clears these memories.

### **Outside temperature**

The outside temperature display does not indicate, if ice is on the road.

Even if a temperature above 32°F (0°C) is displayed, ice may still form on the road, for instance on bridges or when the road passes through a heavily shaded area.

### Tire pressure

The function of the on-board computer **Tire pressure** displays the tire pressures dependent on temperature in the four wheels. You can watch the tire pressure rise and fall while driving. The display is only for information. To correct the tire pressures, always use the displayed values from the "Pressure info" display in the Tire pressure menu.

# Warnings in the Instrument Panel and in the On-Board Computer

If a warning message appears, always refer to the corresponding chapters in the Owner's Manual. Warning messages are issued only if all measurement preconditions are met.

Therefore, check all fluid levels regularly – in particular, always check the engine oil level before refuelling.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
<b>4</b>		Seat belt	Driver and passenger must fasten their safety belts.
USA PARK	PARK	Handbrake	Handbrake not released.
Canada (P)			
		Ignition key not removed	
	<b>Ø</b>	Lights on	
<b>\(\rightarrow\)</b>	$\thickapprox$	Front/rear lid not closed	Close front lid and/or engine compartment lid.
<u> </u>	<b></b>	Refill washer fluid	
		Trip counter reset	Trip odometer is reset to 0.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
		Units are changed	The units kilometers/miles for speed and distance were changed.
		LIMIT Cannot be accepted with vehicle stopped	Current speed can be accepted for the acoustic warning signal only if the vehicle is in motion.
	USA	LIMIT exceeded	Selected speed limit for the acoustic warning signal has been exceeded. Adjust your speed if necessary.
	Canada (ru/)		
Fuel level gauge warning light		Consider range on remaining fuel	Refuel at the next opportunity.
<del></del>	<del>**</del> *	Engine oil pressure too low	Stop immediately at a suitable place, measure oil level with the on-board computer and, if necessary, add engine oil.
Temperature gauge warning light	£	Engine temperature too high	Switch engine off and let it cool. Check coolant level and, if necessary, add coolant.
Temperature gauge warning light flashes	ᇤ	Check coolant level	Switch engine off and let it cool. Check coolant level and, if necessary, add coolant.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
	₾	Check Engine	Please observe the chapter "CHECK ENGINE WARNING LIGHT" on Page 64. Have the fault remedied at an authorized Porsche dealer.
Temperature gauge warning light flashes	S	Failure of engine- compartment blower	Have fault remedied at an authorized Porsche dealer.
	$\Box$	Warning battery/ alternator	Stop in a safe place and switch the engine off. Do not continue driving.  Have the fault remedied at an authorized Porsche dealer.
	<del></del>	Failure indicator	Oil pressure indicator is faulty. Have the fault remedied at an authorized Porsche dealer.
		Failure oil level indicator	Have the fault remedied at an authorized Porsche dealer.
	£.	Failure indicator	Coolant temperature gauge is faulty. Have the fault remedied at an authorized Porsche dealer.
	Ō	Failure indicator	The coolant temperature gauge, tachometer, etc., could be faulty. Have the fault remedied at an authorized Porsche dealer.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
USA	BRAKE WEAR	Service wear on brake pads	Have the brake pads replaced at an authorized Porsche dealer without delay.
Canada			
USA	BRRKE FLUID	Warning brake fluid level	Stop immediately in a suitable place. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
Canada			
USA	(1)	Warning Brake servo	Up to approx. 1 minute after the engine starts: Drive off only if there is sufficient brake booster available and the message and warning light are out. While driving: Stop immediately in a suitable place. Do not continue driving. Have the fault remedied by an authorized Porsche dealer.
Canada	(1)		
USA		Warning brake distribution	Stop immediately in a suitable place. Do not continue driving. Have the fault remedied at an authorized Porsche dealer.
Canada			

Controls, Instruments

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
USA ABS	ABS	ABS failure	Have the fault remedied at an authorized Porsche dealer.
Canada ((iii))	(RS)		
	$\mathfrak{L}$	Airbag failure	Have the fault remedied at an authorized Porsche dealer.
		Failure indicator	The displays of several systems might have failed. Have the fault remedied at an authorized Porsche dealer.
	B	Failure of fuel level indicator Go to workshop	Have the fault remedied at an authorized Porsche dealer.
	<b>*</b> ⊧	Failure outside temperature indicator	Have the fault remedied at an authorized Porsche dealer.
TC OFF	TC OFF	TC failure Drive to workshop	Traction Control is faulty. Adjust your driving style and speed. Consult an authorized Porsche dealer immediately.
<b>6</b>	‡œ	Failure Rear wing control	Driving stability is impaired. Adjust your driving style and speed. Consult an authorized Porsche dealer immediately.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
<b>(</b> )	<b>(</b>	Attention Flat tyre front/rear right/left	Tire pressure warning Serious tire pressure loss has been detected. Stop at a suitable place. Check the tires for signs of damage. The tire pressure to be added of the affected wheel is displayed.
<b>(</b>	<u>(1)</u>	Top up air front/rear right/left	Tire pressure warning Gradual loss of pressure has been detected. Correct the pressure as soon as possible. The tire pressure to be added of the affected wheel is displayed.
<b>(</b>	<b>(3)</b>	Attention Flat tyre Check tyres	Tire pressure warning A significant loss in tire pressure has occurred. Stop at a suitable place. Check the tires for signs of damage. (e.g. after changing a wheel).
<b>(</b>	<u>(1)</u>	Tyre pressure too low Top up air	<b>Tire pressure warning</b> Gradual loss of pressure has been detected. Correct the pressure as soon as possible. (e.g. after changing a wheel).
<b>(</b>	(I)	No monitoring System learning	<b>No RDK (tire pressure) monitoring</b> System has not yet detected new tires. Monitoring is temporarily impossible.
<b>(</b>	<u>(1)</u>	System not active Drive to workshop	No RDK (tire pressure) monitoring There is a fault in the tire pressure monitoring system. The tires are not monitored. Consult an authorized Porsche dealer.

Instrument panel	On-board computer	Text display in on-board computer	Meaning/measure
<b>(1)</b>	<u>(1)</u>	System not active Temporary fault	<b>No RDK (tire pressure) monitoring</b> External interference or excessive temperatures (above 250°F/120°C) at the wheel sensors will cause the system to switch off temporarily. The tyres are temporarily not monitored.
<b>(</b>	(1)	New req. press. rejected New pressures implausible	Fault when setting the tire pressure The pressures set on one axle deviate significantly (at least 6 psi/0.4 bar) from each other.
<b>(</b>	<u>(I)</u>	New req. press. rejected Pressure too low	Fault when setting the tire pressure At least one of the set pressures for driving on the race track is below 25 psi/1.7 bar actual pressure and is thus too low.
<b>(</b>	(1)	Menu RDK is only possible at standstill	The Tire pressure menu can only be called up when the vehicle is stationary.

# **Acknowledging warning messages**

Warning messages can be erased from the on-board computer display.

▶ Push operating lever of on-board computer forward.

You can recall erased warning messages in the "CHECK" menu.



# **Emergency Flasher Switch**

Operational readiness of the emergency flasher does not depend on the ignition lock and turn signal lever position.

▶ If your car is disabled or parked under emergency conditions switch on the emergency flasher **A** in the center console. All turn signals and the indicator light in the switch flash with the same frequency.



### Risk of an accident.

- ▶ Whenever stalled or stopped for emergency repairs, move the car well off the road. Switch on the emergency flasher and mark the car with road flares or other warning devices.
- ▷ Do not remain in the car. Someone approaching from the rear may not realize your vehicle is stopped and cause a collision.

### Danger of fire.

▷ Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.

### Hot engine compartment components can burn skin on contact.

▶ Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently.



In some countries, differences are possible due to provisions of law.

### Note on operation

If the ignition key is removed and the door is opened while the lights (not the parking light left/ right) are on, a **gong** warns of possible battery discharge.

**A** - Rotary switch for parking lights, low beam/high beam **B** - Indicator light for switched on low beam/high beam

### -<u>'Ö</u>-**Light switch**

- 0 Light is switched off.
- 1 Parking lights

Side marker lights, license plate light, instrument illumination

2 - Low beam, high beam

Only with ignition on



# **Turn Signal/ Headlight Dimmer/Flasher Lever**

Turn signals, low beam and high beam are ready for operation when the ignition is on.

- 1 Turn signal left
- 2 Turn signal right
- 3 High beam
- 4 Headlight flasher

Lever in center position - Low beam

When high beam and headlight flasher are selected, the blue indicator light in the tachometer is lit.

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

### Lane changer

- ▶ To indicate your intention when changing lanes on the freeway, slightly lift or depress the lever to the resistance point.
  - The lever will return to the OFF position when released.
- ▶ If the frequency of the display becomes noticeable faster, check the operation of the turn signal bulbs.

### **Headlight flasher**

(With ignition on or off)

- ▶ To flash the headlights to oncomming motorists, slightly pull the lever toward the steering wheel and then release it.
  - The blue indicator light in the tachometer will go on/off as you pull/release the lever.

### Parking light left/right

When the ignition key is removed and the car lights are switched off:

- Turn signal lever in position 1 left parking
- Turn signal lever in position 2 right parking



# **Windshield Wiper / Washer Lever**



Danger of injury when the windshield wiper operates unintentionally.

Risk of damage to the windshield and wiper system.

- ▷ Avoid running the wiper blade over a dry windshield to prevent scratching the glass. Spray washer fluid on the windshield first. A scratched windshield will reduce visibility.
- ▷ Always loosen wiper blade from frozen glass before operating the wiper to prevent damage to the wiper motor or blade.

- Always switch off windshield wiper before cleaning the windshield to avoid unintentional operation (intermittent operation).
- Do not operate headlight washer when it is frozen.
- 0 Windshield wiper off
- 1 Windshield wiper slow
- 2 Windshield wiper fast
- 3 Intermittent operation
- 4 Windshield washer system: Sprays while the lever is pulled towards the

steering wheel in the first position. When the lever is released, a few drying wipes are executed.

5 - Windshield wiper and washer system:

Sprays and wipes while the lever is pulled towards the steering wheel in the **second** position.

6 - Headlight washer

Sprays only while low beam or high beam is switched on.

The spray duration is limited. If heavily soiled. repeat wash.

Persistent dirt (e.g. insect remains) should be regularly removed.

Please observe the chapter "CAR CARE IN-STRUCTIONS" on Page 135.

### Note

The windshield washer nozzles are heated when the ignition is on, as a precaution against freezing.



- **A** Continuous opening and closing **B** Setting vent direction

# **Central and Side vents**

# **Opening vents**

▶ Rotate knurled wheel upward. Opened vents can be identified by white lines on the knurled wheel.

# **Closing vents**

# **Changing air flow direction**

▷ Swivel the vent fins in the desired direction.

Outside air or conditioned air can be delivered from all vents depending on the air-distribution setting.

### Fresh-air intake

In order to ensure proper air intake:

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



Vehicles without air conditioning

# **Heating and Ventilation**

# **Setting temperature**

▶ Turn knob A: To the left – cold, to the right – warm.

### **Setting air quantity**

▷ Set desired air quantity with knob B.

### Note on operation

▷ To prevent the windows from misting, do not switch off the blower when driving.

### **Selecting air distribution**

- ▷ Set infinitely adjustable air distribution with knob C.
- Air flows to central and side vents (recommended setting in Summer)
- Air flows to footwell (closing the center and side vents will increase the air quantity to the footwell significantly)
- Air flows to the windshield, to the vents in the windshield frame, and in the footwell (recommended setting in winter with central and side vents closed)
- Air flows to windshield

### Note on operation

When selecting the air distribution, intermediate settings can be selected: Example:

A setting between the symbols "central vents" and "footwell" direct air to the central, side, and footwell vents.



### **Defrosting windshield and side** windows

▶ Press knob B.

The windshield and side windows are demisted or defrosted as quickly as possible. The air only flows to the windshield and the side windows.

The symbol in the switch lights up red.

When the defrost function is switched on, the following also takes place:

- the door mirrors are heated,
- whenever outside temperatures exceed approx. 37°F/3°C, the air-conditioning compressor is switched on.
- if circulating-air setting was switched on, it will be deactivated.
- ▶ Press knob **B** again to end the defrost function.



### **Switching air-circulation setting** on and off

▶ Press knob **C**.

The outside-air supply is interrupted and only the inside air is circulated.

The symbol in the switch lights up red.



### ∕!\ Warning!

Risk of accident due to impaired vision. In air-circulation setting, the windows can fog

- ▷ Only select circulating-air setting for short periods.
- ▶ If the windows fog up, end air-circulation setting immediately by pressing the knob again and press the knob B so that the windows will be vented.

### Note on operation

If the air conditioning compressor is switched off or for vehicles without air conditioning, the circulating-air setting is limited to 3 minutes.



Vehicles with air conditioning

# Air conditioning system



**Switching compressor for** air-conditioning system on or off

▶ Press knob A. The symbol in the switch lights up red.

### Readiness for operation of the air-conditioning compressor

- at outside temperatures over approx. 37°F/
- at fan setting 1 and higher, if a lower setting is selected, the compressor switches off automatically.

The compressor can be switched off to save fuel.

▶ If the interior temperature is too high, switch on the compressor again.

### Note on operation

To dry incoming air in damp weather, do not switch off the air-conditioning compressor. This will prevent the windows from misting up.

### **General instructions for** air-conditioning compressor

- Can switch off briefly to ensure sufficient engine cooling if the engine is operating under extreme load.
- Switches off automatically at temperatures below approx. 37°F/3°C and cannot be switched on, even manually.
- Operates most effectively with the windows closed. If the car has been in the sun for a long time. however, it is a good idea to ventilate the interior briefly with the windows open.
- Depending on the outside temperature and humidity, condensation can drip from the evaporator and form a pool under the car. This is normal and not a sign of leakage.

If uncooled air flows out when the lowest temperature has been set and the air conditioning compressor has been switched on, switch off the airconditioning compressor and consult with an authorized Porsche dealer.



# **Ashtray**

The ashtray is located in the center console between the seats.

There is no cigarette lighter.

### Opening

▶ Press ashtray lid briefly.

# **Emptying**

▷ Open ashtray and carefully pull out ash insert by the lid.



### Danger of fire.

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



# **Sun Visors**

Swing the sun visors down to prevent glare from the front.

# **Storage in the Passenger** Compartment



Unsecured luggage and heavy objects may come loose during braking, rapid directional changes or in an accident and cause serious personal injury or death.

- ▷ Do not transport any heavy objects in the storage trays.
- ▷ Do not carry unsecured luggage or objects in the passenger compartment.

# **Storage options**

- In the glove compartment,
- in the doors,
- in the door panels,
- in the luggage set,
- storage compartment for the roof panels under the front lid.



# **Glove compartment**



Risk of injury by the glove compartment lid in case of an accident.

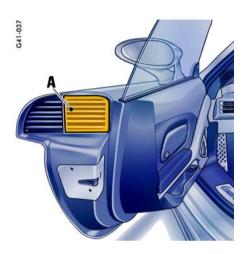
▷ Keep the glove compartment closed while driv-

### Opening

▶ Pull the catch and open the lid.

### Locking

▶ Lock the catch to secure the contents against unauthorized access.



# Storage tray in the door

Each tray contains a leather bag for storing small objects.

# Opening the tray

▶ Press on the lid at the position shown **A**.

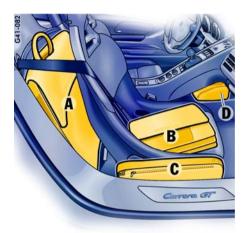
# Closing the tray

▶ Press on the lid at the position shown **A** until it engages.

### Note

Before closing the vehicle door, make sure that the lid is closed.

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# Carrero Gr

### Luggage set

The 5-part luggage set consists of:

- Travel bag in the storage compartment for the roof panels (without roof panels)
- Clothing bag A behind the passenger's seat
- Briefcase **B**e.g. passenger footwell
- Hanging bag C
   e.g. between the passenger seat and door
- Center console bag **D** under the center console

**100** Controls, Instruments

# Hanging the clothing bag

▶ Hang the clothing bag on the rings behind the passenger's side.

# Removing center console bag

▶ Slide the bag out the guide opposite the direction of travel (**arrow**).

### Fastening center console bag

▷ Slide the bag in the guide under the center console until it engages.



- A Opening front lid
- **B** Opening engine compartment lid

# Front lid

# **Unlocking front lid**

▷ Operate the pull-button A next to the driver's

The compartment for the roof panels is illuminated when the lid is opened.

The front lid can also be opened using the radio remote control.

▶ Please observe the chapter "KEYS" on Page 19.



▶ Please observe the chapter "LOAD SWITCH-OFF AFTER TWO HOURS OR FIVE DAYS" on Page 156.

# **Opening front lid**

▶ Raise lid slightly and unlatch the safety catch with the lever (arrow).

# **Closing front lid**

- ▶ Lower the lid and press with both hands (left and right from the crest).
- ▷ Check that the lid has correctly engaged in the lock.



# **Warning light**

The warning light in the instrument panel comes on if the lids are not completely closed.

▶ Fully close the lid.



### Risk of loss of control or an accident, resulting in serious personal injury or death.

▷ Should you notice at any time while driving that one of the lids is not secured properly, please stop immediately in a suitable place and close The front lid may fly up impairing vision.



# **Compartment for the removed roof** panels

- 1 Fastening strap (No. 1) for bottom roof panel
- A Quick Reference Guide for removing the roof panels
- 2 Fastening strap (No. 2) for top roof panel
- **B** Socket wrench for central wheel nuts



- **A** Opening front lid **B** Opening the engine compartment lid

# **Engine compartment lid**



Risk of damage. The engine compartment lid is opened automatically by pneumatic springs when released.

▷ Before unlocking, make sure there is sufficient clearance above the lid.

### Danger of burning.

The area where the engine compartment is vented behind the rear wing and the tailpipes of the exhaust system can become very hot.

▷ Do not touch these areas. Look out for children. Parts of clothing can become damaged.

### Unlocking the engine compartment lid

- ▷ Operate the pull-button **B** next to the driver's seat.
- ▶ Please observe the chapter "LOAD SWITCH-OFF AFTER TWO HOURS OR FIVE DAYS" on Page 156.

### Note

If the vehicle battery is discharged, the engine compartment lid can be opened only by connecting an external electrical power source.

▶ Please observe the chapter "EMERGENCY UN-LOCKING OF THE ENGINE COMPARTMENT LID" on Page 160.

### **Opening the engine compartment lid**

The engine compartment lid is opened automatically by pneumatic springs when released.



### Closing the engine compartment lid



Risk of pinching between the rear wing and engine compartment lid when closing the lid.

- ▶ When closing, put your hand on the lid (arrow) and press the lid until it engages.
- ▶ Lower the lid and press it down.
- ▷ Check that the lid has correctly engaged in the lock.

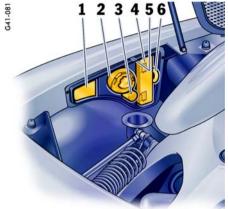


# **Warning light**

The warning light in the instrument panel comes on if the lids are not completely closed.

▶ Fully close the lid.







# Storage compartments in engine compartment

In the engine compartment, there is a storage compartment over the left and right wheel housing.

# Opening the left storage compartment

- ▶ Release latches **A** and remove lid.
- 1 Space for emergency kit
- 2 Tire repair kit
- 3 Screwdriver
- 4 Compressor
- 5 Recovery eye (behind the compressor)
- 6 Front towing eye

# Opening the right storage compartment

▶ Release latch **B** and remove lid.

Space for the warning triangle is in the right storage compartment.

# **Removable roof panels**



Driving with only one roof panel installed is not permitted for aerodynamic reasons. Driving with only one roof panel installed can affect driving behavior.

▶ Do not drive with only one roof panel installed.



### Risk of damage.

- ▷ Only store clean roof panels in the compartment under the front lid (scratches).
- ▷ Only remove and install roof panels in the order described.



# Removing the roof panels and storing them in the compartment under the front

- 1. Move both seats to the front position.
- 2. Roof panel on the passenger's side: Press release button A, keep it pressed and swivel the latching lever downwards (arrow B).



3. Lift roof panel at rear and pull it out of the guides of the windshield frame to the rear.



4. Turn the roof panel so that the painted side faces downward (**Figure**).



5. Place the roof panel on the angles **A** of the foam parts in the compartment under the front

Place the roof panels in the compartment under the front lid.

Close latching lever **B**.

6. Take the fastening strap 1 (No. 1) out of the foam part.

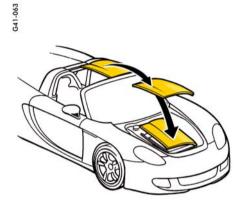


7. Engage the fastening strap (No. 1) on the points **C**.



- 9. Roof panel on the driver's side: Unlock and remove the roof panel.
- 10.Close the latching lever.

8. Make sure that the foam part **D** sits correctly on the corner of the roof panel (**arrow**). Tighten the fastening strap, close the Velcro strip.



### Note on operation

The roof panel on the driver's side is stored in the same position in the compartment under the front lid as it was taken from the roof (Figure).



11. Place the roof panel on the angles **A** of the foam parts in the compartment under the front

Place the roof panels in the compartment under the front lid.



12. Take the fastening strap 2 (No. 2) out of the foam part. Engage the fastening strap (No. 2) on the points **B**.

13. Tighten the fastening strap, close the Velcro strip.



14.Close the sliding panel **C** of the rear roof mounting point.

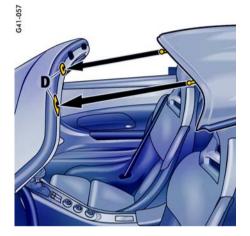


## **Installing the roof panels**

- 1. Move both seats to the front position.
- 2. Open the sliding panels **A**.
- 3. Loosen the Velcro strip of the fastening strap (No. 2).
- 4. Carefully remove the fastening strap.
- 5. Roll together the fastening strap and store it in the foam part.
- 6. Take the roof panel for the driver's side out of the compartment under the front lid.



7. Press release button **B**, keep it pressed and open the latching lever (**arrow C**).



8. First insert the roof panel into the guides **D** in the windshield frame.



9. Lower the roof panel at rear. Make sure that the centering pin engages in the guide E.



- 10. Press the roof panel on the rear edge downward and lock the latching lever (arrow F), until it audibly engages.
- 11. Repeat the procedure with the roof panel for the passenger's side.

## **Protective bag for the roof panels**

To protect against dirt, the protective bags can be pulled over the removed roof panels.



#### Risk of damage. The roof panels could be scratched.

▷ Only pull the protective bags over clean roof panels.

## **Vehicle Cover**

To protect against dirt, the vehicle cover can be pulled over the vehicle.



#### Risk of damage. The vehicle could be scratched.

▷ Only pull the vehicle cover over a clean vehicle.

#### Risk of damage.

The vehicle cover could become damaged by heat in the area around the engine compartment.

▷ Only pull the vehicle cover over the vehicle when it has cooled off.

#### **Porsche Online Pro**



There is a danger of accident if you set or operate the on-board computer. Porsche Online Pro or other equipment when driving. This could distract you from the traffic and cause you to lose control of the vehicle resulting in serious personal injury or death.

- ▷ Operate the components while driving only if the traffic situation allows you to do so safely.
- ▶ Carry out any complicated operating or setting procedures only with the vehicle stationary.
- ▶ Refer to the separate operating instructions before putting the Porsche Online Pro into operation.

When put into operation for the first time, a distance of approx. 31 miles (50 km) must be driven in order for the navigation system to complete the process of fine calibration.

The same applies when the tires are changed or new tires fitted.

Full location accuracy is not yet achieved during the fine-calibration process.

If the vehicle has been transported (e.g. ferry, car train), the system may take a few minutes after being switched on before it determines the current location.

Serious tire slip (e.g. spinning wheels on snow) may result in temporarily inaccurate navigation.

When the battery has been disconnected, it may take up to 15 minutes before the navigation system becomes operational again.



#### Compact disc player



## To avoid damage to compact disc player and

- Use only compact discs labeled as shown, having no dirt, damage or warpage.
- ▶ Never attempt to disassemble or oil any part of the player unit.

Do not insert any object other than a disc into

Remember there are no user-serviceable parts inside the compact disc player.

- ▷ Do not allow the disc to sustain any fingerprints, scrapes or stickers on the surfaces. This may cause poor sound quality. Hold the disc only on the edge or center hole.
- ▶ When not in use, take the disc out of the player, put the disc back into its case and store it away from dust, heat, damp and direct sun-

Leaving the disc on the dashboard in the sun can damage the disc.

If the disc gets dirty, clean the disc by wiping the surfaces from the center to the outside in a radial direction with a soft cloth.

Do not use a conventional record cleaner or antistatic record preservative.

Disc cleaners are available in audio stores.

#### Hands-free microphone

The hands-free microphone was designed especially for Porsche Online Pro.

▶ Please observe the separate operating instructions for Porsche Online Pro.

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#### **Car Audio Operation/Tips**

▶ Please observe the chapter "LOAD SWITCH-OFF AFTER TWO HOURS OR FIVE DAYS" on Page 156.

#### FM reception

A vehicle is not an ideal place to listen to a radio. Because the vehicle moves, reception conditions are constantly changing.

Buildings, terrain, signal distance and noise from other vehicles are all working against good recep-

Some conditions affecting FM may appear to be problems when they are not.

The following characteristics are completely normal for a given reception area, and they do not indicate any problem with the radio itself.

#### Note

Electronic accessories should only be installed by vour authorized Porsche dealer.

Equipment which has not been tested and approved by Porsche may impair radio reception.

#### Fading and drifting

FM range is limited to about 25 miles (40 km). except for some high power stations.

If a vehicle is moving away from the desired station's transmitter, the signal will tend to fade and/ or drift. This condition is more prevalent with FM than AM, and is often accompanied by distortion. Fading and drifting can be minimized to a certain degree by careful attention to fine tuning or selection of a stronger signal.

#### Static and fluttering

When the line-of-sight link between a transmitter and vehicle is blocked by large buildings or mountains, the radio sound may be accompanied with static or fluttering because of the characteristic of FM.

In a similar effect, a fluttering noise is sometimes heard when driving along a tree-lined road.

This static and fluttering can be reduced by adjusting the tone control for greater bass response until the disturbance has passed.

#### Multipath

Because of the reflecting characteristics of FM. direct and reflected signals may reach the antenna at the same time (multipath) and cancel each other out.

As a vehicle moves through these electronic dead spots, the listener may hear a momentary flutter or loss of reception.

#### Station swapping

When two FM stations are close to each other, and an electronic dead spot, such as static or multipath area, interrupts the original signal, sometimes the stronger second signal will be selected automatically until the original one returns.

This swapping can also occur as you drive away from the selected station and approach another station of a stronger signal.

## **Car Telephone and Aftermarket Alarms**

#### Important legal and safety information regarding the use of cellular telephones

Some states prohibit the use of cellular telephones while driving a vehicle. Check the laws and regulations on the use of cellular telephones in the areas where you drive.



#### Risk of an accident.

Severe personal injury or death can result in the event of an accident.

Looking away from the road or turning your attention away from your driving can cause an accident and serious or fatal injury.

When using your cellular telephone, you should always:

- ▷ Give full attention to your driving pull off the road and park before making or answering a call if traffic conditions so require; and
- ▶ Keep both hands on the steering wheel use hands-free operation (if available) - pull off the road and park before using a hand-held telephone.

#### It is essential to observe the instructions of the telephone manufacturer before putting the telephone into operation.

Any portable telephone or radio transmitter which is used in a Porsche must be properly installed in accordance with the technical requirements of Porsche.

## The transmission power must not exceed

The devices must possess a type approval for your vehicle and have an "e" symbol.

If you should require equipment with transmission power values greater than 10 W, please consult your authorized Porsche dealer for this purpose. He is familiar with the technical requirements for installing devices of this kind.

The antennas for all radios and telephones with a transmitting antenna must be externally mounted.

The improper installation of radios or telephones or use of a radio or telephone with a transmitting antenna inside the car may cause the warning lights to come on.

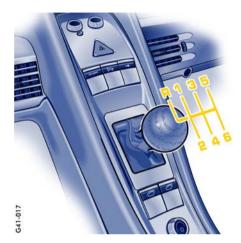
Improper installation of such equipment can create a discharged battery or excessive current draw from added equipment.

If aftermarket systems are installed by non-dealership technicians or outside the selling dealer. problems may result. Installation of aftermarket equipment is not covered under the New Car Warrantv.

▶ Consult your authorized Porsche dealer about the installation of non Porsche approved equipment.

#### Reception quality

The reception quality of your car telephone will change constantly when you are driving. Interference caused by buildings, landscape and weather is unavoidable. It may become particularly difficult to hear when using the hands-free function due to external noise such as engine and wind noise.



## **Gear-Shifting**

The positions of the gears are shown on the shift diagram on the center console under the gearshift lever.



#### Risk of an accident.

▷ Always check the movement of the clutch pedal before driving and make sure that it is not obstructed by a floor mat or any other object.

#### To avoid damage to the clutch and transmission:

- ▷ Always depress the clutch pedal fully when changing gears. Make sure that the gearshift lever is completely engaged.
- ▷ Only shift into reverse when the car has come to a complete stop.

## Shifting

▷ Only shift gears by moving the gearshift lever to the left and right in the shift gate or by moving the gearshift lever straight up and down.

Pushing the gearshift lever through the entire shifting path can cause "snagging and misshifting".

#### Reverse

▶ Depress the clutch pedal for several seconds before shifting into reverse. Only then move the gearshift lever to the left,

overcoming the spring tension, and then to the front.

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

#### Permitted engine speed

▷ Change into a higher gear before the needle reaches the red mark on the tachometer, or ease off the accelerator.

If the red zone is reached during acceleration, fuel supply to the engine is interrupted.



#### To avoid severe engine damage.

▷ Always observe the engine rpm before downshifting to a lower gear, so you do not exceed the maximum engine rpm.

# **Maintenance, Car Care**

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## **Exercise Extreme Caution when Working on your Vehicle**



#### Ignoring the following instructions may cause serious personal injury or death.

- ▶ The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages.
  - This caution applies to the entire vehicle.
- ▷ Only work on your vehicle outdoors or in a well ventilated area.
- ▶ Ensure that there are no open flames in the area of your vehicle at any time when fuel fumes might be present. Be especially cautious of such devices such as hot water heaters which ignite a flame intermittently.
- ▶ Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact. The area where the engine compartment is vented behind the rear wing and the tailpipes of the exhaust system can also become very hot.

- ▶ Be alert and cautious around engine at all times while the engine is running. If work has to be performed with the engine running, always set the parking brake, and make sure the shift lever is in neutral position.
- ▶ In particular, be very careful to ensure that items of clothing (ties, shirt, sleeves etc.). iewelry, long hair, hand or fingers cannot get caught in the engine-compartment blowers. fans, belts or other moving parts. The radiator and radiator fans are in the front of the car and in the engine compartment. The engine-compartment blowers are mounted
  - The fans can start or continue running as a function of temperature, even with the engine switched off.

in the engine compartment.

- Carry out work in these areas only with the engine off, the ignition switched off, and exercise extreme caution.
- ▶ When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- ▷ Always support your car with safety stands if it is necessary to work under the car.
- ▶ When working under the car without safety stands but with the wheels on the ground, make sure the car is on level ground, the wheels are blocked, and that the engine cannot be started. Remove the ignition key.

- ▶ Do not smoke or allow an open flame around the battery or fuel. Keep a fire extinguisher in close reach.
- ▷ Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer. Improper maintenance during the warranty period may affect your Porsche warranty coverage.
- Supplies of fluids, e.g. engine oil, brake fluid or coolant, are hazardous to your health. Keep these fluids out of children's reach and dispose of them in accordance with the appropriate regulations.
- Some countries require additional tools and special spare parts to be carried. Please make enquiries before driving abroad.

#### Power measurements

Power measurements on dynamometers are not approved by Porsche.



## **Coolant Level**

▶ Please observe the chapter "EXERCISE EX-TREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 116.

The cooling system is filled at the factory with a permanent coolant.

It provides year-round protection from corrosion and freezing down to -31°F/-35°C (Nordic countries -40°F/-40°C).

▷ Only use antifreeze authorized by Porsche.

## Checking and topping off coolant level

The expansion tank for the coolant is located on the front side of the engine compartment in the middle.

▷ Check the coolant level regularly.

When the engine is cold and the car is level the fluid level must lie between the "MIN" and "MAX" markings.

## ✓!\ Warning!

Danger of serious personal injury from scalding. Coolant is hazardous to your health, and may be fatal if swallowed.

- ▷ Do not open the cap of the expansion tank while the engine is hot.
- ▷ Allow the engine to cool down before opening the cap and protect your hands, arms and face from any possible escape of hot coolant.
- ▶ Keep coolant out of children's reach.
- ▶ Also, keep coolant away from your pets. They can be attracted to it should there be a spill, or to used coolant left in an open container. Coolant can be deadly to pets if consumed.

- 1. Switch engine off and let it cool. Please observe the chapter "COOLING SYS-TEM" on Page 60.
- 2. Remove runoff hose.
- 3. Cover the expansion tank cap with a thick rag. Open cap slowly and carefully and allow overpressure to escape. Then unscrew cap completely.
- 4. Read off coolant level (figure).
- 5. Only add a mixture of antifreeze and water in equal parts, and do not exceed the "MAX" mark.

#### Antifreeze in coolant:

50% gives protection down to -31°F/-35°C 60% gives protection down to -58°F/-50°C

## Warning!

#### Risk of damage to drive belts due to spilling coolant.

- ▶ Top off coolant carefully.
- ▷ Do not exceed the max, mark when topping off coolant.
- 6. Screw cap firmly on.
- 7. Attach the runoff hose again.

If in an emergency pure water has been added, the mix ratio must be corrected at an authorized Porsche dealer.

Significant loss of coolant indicates leakage in the cooling system.

The cause should immediately be remedied at an authorized Porsche dealer.

#### **Engine-compartment blowers.** radiator fans

The radiator and radiator fans are in the front of the car and in the engine compartment. The engine-compartment blowers are mounted in the engine compartment.



#### Risk of injury.

extreme caution.

After the engine is switched off, the enginecompartment and coolant temperatures are monitored for approx. 20 minutes. During this period, and depending on temperature, the engine-compartment blowers and radiator fans may continue to run or

start to run. Carry out work in these areas only with the engine off, the ignition switched off, and exercise

## **Engine Oil**

#### **Engine oil consumption**

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

If the vehicle is used for repeated short trips, and consumes a normal amount of oil, the engine oil measurement may not show any drop in the oil level at all, even after 600 miles (1,000 km) or more. This is because the oil is gradually becoming diluted with fuel or moisture, making it appear that the oil level has not changed.

The diluting ingredients evaporate out when the vehicle is driven at high speeds, as on an expressway, making it then appear that oil is excessively consumed after driving at high speeds.

If the conditions you drive your vehicle in are dusty, humid, or hot, the frequency of the oil change intervals should be increased.

If the vehicle is driven at a high rate of speed. climatic conditions are warm, and the load is high, the oil should be checked more frequently, as driving conditions will determine the rate of oil consumption.

- The engine in your vehicle depends on oil to lubricate and cool all of its moving parts. Therefore, the engine oil should be checked regularly and kept at the required level.
- Make it a habit to have the engine oil level checked with every fuel filling.
- The oil pressure warning light is not an oil level

The oil pressure warning light indicates serious engine damage may be occuring when lit, if engine rpm is above idle speed.

## **Engine Oil Level**

- Please observe the chapter "EXERCISE EX-TREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 116.
- Regularly check the oil level using the on-board computer each time before refuelling.
   Please observe the chapter "ON-BOARD COM-PUTER (BC)" on Page 65.

The difference between the min. and max. marks on the segment display is approx. 2 liters (2.13 quarts).

One segment of the display corresponds to a quantity of approx. 0.3 liters (0.31 quart).



Risk of burning from hot parts in engine compartment. Risk of injury by rotating parts. The engine compartment blowers in the engine compartment can start up even with engine off.

- Exercise extreme caution when working on the engine compartment.
- ▶ Top off engine oil only with the engine off.

## Engine oil is hazardous to your health and may be fatal if swallowed.

▶ Keep engine oil out of children's reach.

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

Always protect your skin by washing thoroughly with soap and water.

The oil filler is in the engine compartment.

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## **Topping off engine oil**

- 1. The on-board computer indicates how much oil must be added.
- 2. Switch off the engine.
- 3. Open the twist grip **A**, open the cap of the oilfiller opening and remove.
- 4. Add at most half a liter of engine oil at a time. Never add more engine oil than required to reach the max. mark.
- 5. Close the oil filler cap carefully.

# 6. Measure oil level with the on-board computer

Observe the conditions for measuring the oil level

- 7. Add more engine oil if necessary. Never add more engine oil than required to reach the max. mark.
- 8. Close the oil filler cap carefully. Make sure that the cap is completely closed.

## **Engine Oil Recommendation**

Recommended oil viscosity ranges dependent on ambient temperatures

## Above 14°F/-10°C

SAE 0W - 40, 5W - 40 and higher.

#### Below 14°F/-10°C

SAE OW - 40, 5W - 40.

- ▶ Use only engine oils approved by Porsche.
- ▶ If in doubt ask your authorized Porsche dealer for Porsche tested and approved all-season oils.

#### Oil change

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

▶ Please observe the chapter "CAPACITIES" on Page 183.

We recommend that you have the engine oil changed at your Porsche dealer, who has the reguired oils and the necessary filling equipment.

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

All current engine oils are compatible with each other, i. e. when making an oil change it is not necessary to flush the engine if you wish to use a different brand or grade of oil.

Since, however, each brand of oil has a special composition, you should, if possible, use the same oil brand if it becomes necessary to top off between oil changes.

If your vehicle is used frequently in stop-and-go traffic in cold weather, the engine will not always be properly warmed up.

Condensation from products of combustion may accumulate in the oil. In this case, it is advisable to change the oil more frequently so that your engine once again has 100% efficient engine oil.

#### **Engine oil performance class**

Engine oil is not only a lubricant, but also serves to keep the engine clean, to neutralize the dirt which penetrates into the engine through combustion and to protect the engine against corrosion. To perform these functions, the oil is provided with additives which have been specially developed for these functions.

The efficiency of an oil is expressed, for example, by the API. ILSAC or ACEA classifications.

#### Viscosity

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

The viscosity of an oil is, therefore, always the same if it has the same number of an SAE class.

Oils with two viscosities are called multigrade oils: oils with only one viscosity are termed singlegrade oils.

Single-grade oils cannot be used in your engine.

The viscosity of the engine oil for your Porsche has to be chosen according to the ambient temperature given in the engine oil recommendation table.

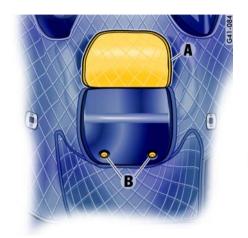
## **Brake Fluid Level**

- ▷ Please observe the chapter "EXERCISE EX-TREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 116.
- **▶** Use only new (unused) Original Porsche brake fluid.



Brake fluid is hazardous to your health, and may be fatal if swallowed. Brake fluid also attacks paintwork.

- ▶ Keep brake fluid out of children's reach.
- ▶ Take care while topping off brake fluid not to soil the compartment of the roof panels or items of luggage.



#### **Opening the cover of the brake fluid** reservoir

The reservoir for the hydraulic braking system is located in the compartment for the roof panels under a cover.

- 1. Release the cover **A** (Velcro strap) and open.
- 2. Unscrew screws B.
- 3. Open cover C.



## **Checking the brake fluid level**

- ▷ Check the brake-fluid level regularly at the transparent reservoir.
- 1. Switch on the ignition for approx. 1 minute so that the accumulator fills.
- 2. Read the fluid level. The fluid level should always lie between the "MIN" and "MAX" marks.

A slight decrease in the fluid level due to wear and automatic readjustment of the disc brakes is nor-

If, however, the fluid level falls markedly or below the "MIN" mark, the braking system may have developed a leak.

▶ Have the braking system checked immediately at an authorized Porsche dealer.

#### **Changing the brake fluid**

Brake fluid absorbs moisture from the air over time. This accumulation of water lowers the boiling point and, under certain operating conditions, can affect the braking action.

Therefore have the brake fluid changed in accordance with the change intervals stated in the brochure "Maintenance".



## **Warning light USA**



#### **Warning light Canada**

The brake-fluid warning lights in the instrument panel and on-board computer indicate:

- brake-fluid level too low.
- in conjunction with large pedal travel, a braking-circuit failure.

#### If the warning lights should light up while driving:

- Stop immediately in a suitable place.
- ▷ Do not continue driving. Please have the fault remedied at your nearest authorized Porsche dealer.

#### Brake booster warning

The brake booster is monitored, in addition to the brake fluid level.

If the brake-fluid warning light lights up after starting the engine, wait to drive until the required pressure for the brake booster is established and the warning light goes out.

If the brake fluid warning light in the instrument panel does not go out, there could be a defect in the brake booster.



#### Risk of accident due to altered braking behavior.

- Adjust your speed accordingly for longer braking distances, higher required pedal pressures, and altered braking behavior.
- ▷ Drive carefully to an authorized Porsche dealer.

## **Fuel Economy**

Fuel economy will vary depending on where, when and how you drive, optional equipment installed, and the general condition of your

A car tuned to specifications and correctly maintained, will help you to achieve optimal fuel economy.

- ▶ Have your vehicle tuned to specifications. Air cleaner should be dirt free to allow proper engine "breathing". Battery should be fully charged. Wheels should be properly aligned. Tires should be inflated at correct pressure.
- ▷ Always monitor your fuel consumption.
- Drive smoothly, avoid abrupt changes in speed as much as possible.
- Avoid jack rabbit starts and sudden stops.
- ▶ Do not drive longer than necessary in the lower gears. Shifting into a higher gear early without lugging the engine will help save fuel.
- ▶ Prolonged "warm up" idling wastes gas. Start the vehicle just before you are ready to drive. Accelerate slowly and smoothly.
- ▷ Switch off the engine if stationary for longer periods.

- ▷ Any additional weight carried in the vehicle reduces fuel economy. Always keep cargo to a minimum and remove all unnecessary items.
- ▶ Organize your trips to take in several errands in one trip.
- ▷ All electrical accessories contribute to increased fuel consumption.
- ▷ Only switch on the air conditioning when neces-

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

▶ Please observe all local and national speed limits.

## **Operating Your Porsche in other Countries**

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

If you plan to take your Porsche outside the continental limits of the United States or Canada, there is the possibility that

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

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

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

## **Fuel**



## Fuel is highly flammable and harmful to health.

- ▶ Fire, open flame and smoking are prohibited when handling fuel.
- ▷ Avoid contact with skin or clothing.
- ▷ Do not inhale fuel vapors.

# To prevent damage to the emission control system and engine:

- ▶ Never drive the tank completely out of fuel.
- ▷ Avoid high cornering speeds after the warning lights have come on.
- Please observe the chapter "EMISSION CONTROL SYSTEM" on Page 128.
   Please observe the chapter "FUEL ECONOMY" on Page 124.
   Please observe the chapter "LEVEL GAUGE" on Page 61.

#### Check engine warning light

If the warning lights in the instrument panel and onboard computer come on and remain on while driving, it suggests:

- an improperly tightened tank cap or
- refuelling with engine running.



## **Opening the filler flap**

The filler opening is under the filler flap in the rear right fender.

▶ With the vehicle unlocked, press on the front part of the filler flap (arrow) to open the flap.

The filler flap is centrally locked along with the other locks.



#### Refuelling

Fuel tank capacity is listed under "Capacities". Porsche does not recommend the use of fuel additives.

▶ Please observe the chapter "CAPACITIES" on Page 183.

- 1. **Important:** Stop the engine and switch off the ignition.
- 2. Slowly unscrew the tank cap. Place the tank cap on the filler flap (arrow).
- 3. Insert fuel-hose nozzle fully into the filler neck with the handle of the fuel-hose nozzle facing down.
- 4. Do not add further fuel once the correctly operated automatic fuel-hose nozzle has switched off. Fuel could spray or could run over in warm temperatures.
- 5. Replace the tank cap immediately after refuelling and turn it until you hear it and feel it

If you lose the tank cap, you must replace it only with an original part to reduce the possibility of a fire in the event of a collision.

#### Fuel Recommendations

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

Your engine is designed to provide optimum performance and fuel economy using unleaded premium fuel with an octane rating of 98 RON (93 CLC or AKI). Porsche therefore recommends the use of these fuels in your vehicle.

Porsche also recognizes that these fuels may not always be available. Be assured that your vehicle will operate properly on unleaded premium fuels with octane numbers of at least 95 RON (90 CLC or AKI), since the engine's "Electronic Oktane™ knock control" will adapt the ignition timing, if necessary,

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

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

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

#### Octane ratings

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

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

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

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

For example: 95 RON equals 90 CLC or AKI

#### **Fuels containing alcohol and ether**

Some areas of the U.S. require oxygenated fuels during certain portions of the year. Oxygenated fuels are fuels which contain alcohols (such as methanol or ethanol) or ether (such as MTBE).

Under normal conditions, the amount of these compounds in the fuel will not affect driveability.

You may use oxygenated fuels in your Porsche, provided the octane requirements for your vehicle are met. We recommend, however, to change to a different fuel or station if any of the following problems occur with your vehicle:

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

#### **Fuels containing MMT**

Some North American fuels contain an octane enhancing additive called methylcyclopentadienyl manganese tricarbonyl (MMT).

If such fuels are used, your emission control system performance may be negatively affected.

The check engine warning light on your instrument panel may turn on.

If this occurs, Porsche recommends you stop using fuels containing MMT.

#### **Portable Fuel Containers**



Portable fuel containers, full or partially empty, may leak causing an explosion, or result in fire in case of an accident.

▶ Never carry additional fuel in portable containers in vour vehicle.

## **Emission Control System**

#### In the interest of clean air

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

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

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

You, as the owner of the vehicle, have the responsibility to provide regular maintenance service for the vehicle and to keep a record of all maintenance work performed. To facilitate record keeping, have the service performed by authorized Porsche dealers. They have Porsche trained technicians and special tools to provide fast and efficient service.

#### To assure efficient operation of the Emission Control System:

- accordance with the recommendations described in your Maintenance Booklet. Lack of proper maintenance, as well as improper use of the vehicle, will impair the function of the emission control system and could lead to damage.
- ▷ Do not alter or remove any component of the emission control system.
- ▷ Do not alter or remove any device, such as heat shields, switches, ignition wires, valves, etc., which are designed to protect your vehicle's emission control system. In addition to serious engine damage, this can result in a fire if excess raw fuel reaches the exhaust system.
- ▷ Do not continue to operate your vehicle if you detect engine misfire or other unusual operating conditions.

#### Parking



#### Danger of fire.

- ▷ Do not park or operate the vehicle in areas where the hot exhaust system may come in contact with dry grass, brush, fuel spill or other flammable material.
- ▶ If your car catches on fire for any reason, call the fire department. Do not endanger your life by attempting to put out the fire.

#### Undercoating



#### Danger of fire and serious personal injuries or death.

Do not apply undercoating or rust-proofing on or near the exhaust manifold, exhaust pipes, catalytic converters or heat shields. During driving the substance could overheat and ignite.

#### **How Emission Control Works**

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

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

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

#### Oxvgen sensor

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

#### Crankcase ventilation

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

## **Catalytic converters**

The catalytic converters are efficient "clean-up" devices built into the exhaust system of the vehicle. The catalytic converters burn the undesirable pollutants in the exhaust gas before it is released into the atmosphere.

The exclusive use of unleaded fuel is critically important for the life of the catalytic converters. Therefore, only unleaded fuel must be used.

## The catalytic converters will be damaged by:

- push or tow starting the vehicle
- misfiring of the engine
- turning off the ignition while the vehicle is mov-
- driving until the fuel tank is completely empty
- by other unusual operating conditions.
- ▶ Do not continue to operate vour vehicle under these conditions, since raw fuel might reach the catalytic converters. This could result in overheating of the converters. Federal law prohibits use of leaded fuel in this car.

## **Fuel Evaporation Control**

#### **Fuel tank venting**

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

#### **Vapor control system and storage**

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

#### **Purge system**

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



## **Washer Fluid**

The reservoir, with a blue screw cap, is in the engine compartment.

## Capacity

The capacity is approx. 4.8 quarts/4.5 liters.

#### Topping off washer fluid

Clean water is generally not enough to clean the windshield and headlights.

It is advantageous to add a winter cleaner giving antifreeze protection or a suitable summer cleaner, depending on the season. Follow the instructions for the mixing ratio.

- 1. Please note all the information on the refill container of the cleaning agent.
- 2. Open cap of the washer-fluid reservoir.
- 3. Top up washer fluid and close cap properly.
- ▷ Do not use engine coolant anti-freeze or any other solution that can damage the car's paint, in the washer reservoir.

## **Warning light**

The warning lights in the instrument panel and onboard computer light when approx.1 quart/ 0.5 liter is left in the reservoir.



## ✓! Warning!

Risk of accident.

When the engine is stopped (e.g. when on tow) or the hydraulic system fails, there is no assistance for steering.

Therefore, substantially more force will have to be exerted in order to steer.

- ▷ Exercise great care when being towed.
- ▶ Have the fault remedied at your nearest authorized Porsche dealer.

## **Power Steering**

Power steering is assisted by hydraulic auxiliary

The hydraulic fluid reservoir is located in the engine compartment.

#### Note

The flow noise heard at full steering lock is designrelated and does not indicate a defect in the steering system.

#### **Checking hydraulic fluid**

- ▶ Please observe the chapter "EXERCISE EX-TREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 116.
- ▷ Only use hydraulic fluid authorized by Porsche. Specification: Please observe the chapter "CAPACITIES" on Page 183.

Check the fluid level with the engine stopped and engine at operating temperature.

- 1. Start the engine and let it idle for approx. 20 seconds. Switch off the engine.
- 2. Open the engine compartment lid.
- 3. Open the reservoir cap.
- 4. Wipe measuring rod. Close cap and re-open. The fluid level should lie in the area of the middle mark (figure). Add hydraulic fluid if necessary.
- 5. Close cap carefully. Close engine compartment lid.

Noticeable loss of fluid indicates leakage in the system.

The cause should be remedied immediately at an authorized Porsche dealer.

## **Wiper Blade**

- ▶ When wiper performance deteriorates, replace the wiper.
- ▶ Please observe the chapter "CAR CARE IN-STRUCTIONS" on Page 135.



## Risk of damage if a wiper blade that is frozen in place is loosened incorrectly.

▶ Thaw the wiper blade before loosening it.

#### Risk of damage if a wiper blade is not changed properly, it can come loose when the car is moving.

▷ Check whether the wiper arm is seated securely after replacing it.

#### Maintenance note

If the wiper blade rubs or squeaks, this can be as a result of the following:

- If the vehicle is washed residues may adhere to the windshield. These residues can only be removed using a special cleaning solution. Please contact your authorized Porsche dealer for further information.
- The wiper blade may be damaged.
- ▶ Replace a damaged wiper blade as soon as possible.

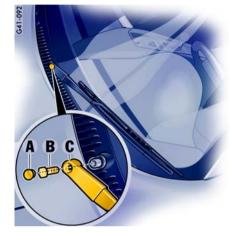
## Replacing a wiper blade



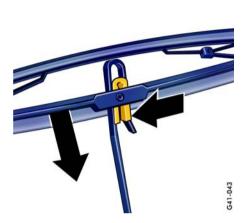
Risk of damage.

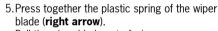
The wiper arm can collide with the front lid when removing from the axle.

▷ Carefully remove the wiper arm.



- 1. Pull out ignition key.
- 2. Remove cover **A** from the wiper arm.
- 3. Unscrew screw B.
- 4. Pull off wiper arm C.



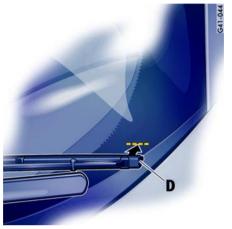


Pull the wiper blade out of wiper arm.

6.Insert a new wiper blade and ensure that it engages.

Ensure that the new wiper blade is inserted into the wiper arm in the same position. The spoiler must point downwards.

Only use an Original Porsche wiper blade with spoiler.



7. Push on wiper arm C.

8. Screw in screw **B**. The wiper blade **D** must lie against the marking on the windshield (arrow).

9. Tighten screw.

Tightening torque: 21 Nm (16 ftlb.)

10.Push cover **A** on the screw.

## **Air Filter**

A dirty air filter not only reduces engine performance, but can lead to premature engine wear.

Regular filter replacement is part of the routine maintenance service.

▷ In dusty conditions, check the filter element more frequently and replace if necessary.

## **Combination Filter**

The fresh air passing through the combination filter into the passenger compartment is virtually free of dust, pollen and unpleasant odors.

▶ If the outside air is polluted by exhaust fumes, press the circulating-air button.

A dirty filter can be the cause of reduced air flow:

▶ Have filter replaced by your authorized Porsche dealer.

Regular filter replacement is part of the routine maintenance service.

## **Manual Transmission Oil**

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

▷ Please observe the chapter "CAPACITIES" on

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

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

## **Car Care Instructions**

▶ Please observe the chapter "EXERCISE EX-TREME CAUTION WHEN WORKING ON YOUR VEHICLE" on Page 116.

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

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

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

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

## \ Warning!

Risk of serious personal injury or damage to the vehicle or property.

Cleaning agents may be hazardous to your health.

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

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

Moisture and road salt on brakes may affect braking efficiency.

▶ Test the brakes after each vehicle washing.

#### Washing



#### Risk of damage to diverse vehicle parts and to the wheels.

▷ Do not wash the vehicle in automatic car wash-

The best method of protecting your car from the damaging effects of the environment is frequent washing and the application of a preservative. The underside of your vehicle should also be thoroughly washed for cinders, salt or sanding at winter's end.

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

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

Dark colors are also more susceptible to scratching because of the composition of their pigments and require particularly careful paint care.

▷ Do not wash your car in bright sunlight or while the bodywork is still hot.

- ▶ When washing by hand, use abundant water, a soft sponge or wash brush, and Porsche car shampoo.
- Begin by spraying the body thoroughly with water to rinse away loose dirt.
- ▷ After washing, rinse the car with plenty of water and then dry with a chamois leather. Do not use the same chamois leather for drying as you use for cleaning the windshield and windows.



Moisture which gets on to the brakes during a car wash can reduce braking efficiency or make the brakes pull unevenly which could increase the danger of an accident, causing serious personal injuries or death.

▷ Always apply the brakes a few times after washing the car to test braking efficiency and dry the brake discs.

When doing this, take care not to hamper other road users behind you (traffic conditions permitting).

#### Door lock

- ▶ To prevent the door lock from freezing during the cold season, the lock cylinder should be covered during a wash.
- ▶ Should the lock freeze, use an ordinary de-icer. In many cases, a well warmed key can help. Never use excessive force.

#### **Paint**

▶ Never rub a dusty car with a dry cloth since dust particles are abrasive and could dull and damage the surface finish.

The paintwork of your car is exposed to all types of mechanical and chemical conditions, particularly climatic ones such as bright sunlight, rain, frost and snow. Ultraviolet light, rapid changes in temperature, rain, snow, industrial dust and chemical deposits constantly attack the paint which is only able to withstand such exposure in the long term if it is given regular care and attention.

- ▶ Do not apply silicone polishes to the windshield or windows.
- ▶ Do not treat matt-painted components with preservatives or polishes as this will spoil the matte effect.

#### Preservation

The paint surface becomes dull over time due to weathering. It is therefore necessary to preserve the paint regularly.

This keeps the paint shiny and elastic. Dirt is prevented from adhering to the paint surface and industrial dust is prevented from penetrating the paint.

Provided it is washed and treated with preservative regularly, the brand new finish of your car will be retained for years to come.

▶ Apply the Porsche paint preservative after the car wash and polish it dry to obtain a bright finish or simply add a liquid preservative regularly to the final rinse water.

#### **Polishing**

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

#### Spots and stains

- ▶ Remove tar stains, grease, oil spots and dead insects as soon as possible with Insect Remover. They can cause discoloration if allowed to remain on the paintwork.
- ▶ Wash the affected area immediately after treating it.

#### Minor paint damage

- ▶ The special features of carbon fiber technology require that checking and damage analysis on the chassis and body (e.g. after accidents) must only be performed by your authorized Porsche dealer.
- ▶ Have minor paint damage (cracks, scratches) or stone damage) repaired immediately by your authorized Porsche dealer.

#### **Engine compartment**

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

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



#### Risk of damage.

- ▷ Do not point the cleaning jet directly at the alternator, or cover the alternator.
- ▷ Do not point the cleaning jet directly at the intake openings. Water can enter the intake system.
- ▷ Do not point the cleaning iet directly at the transmission vent. Water can enter the transmission.

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

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#### Windows

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

- ▷ Clean all windows regularly, inside and outside, with Porsche window cleaner.
- ▶ If you use a chamois leather for the windows, do not use it for paintwork as it will otherwise pick up a certain amount of preservative or polish and could smear the windows and thus impair vision.
- Remove dead insects with the Porsche insect remover.

#### Wiper blade

A wiper blade that is in perfect condition is vital for a clear view.

- ▶ Replace the wiper blade twice a year (before and after the cold season) or whenever wiper performance deteriorates.
- ▶ Periodically clean the wiper blade with window cleaner, especially after the vehicle has been washed.

We recommend Porsche window cleaner. If it is very dirty (e.g. with insect remains), it can be cleaned with a sponge or cloth.

#### Undercoating

Damage to the surface of the underbody while driving cannot be ruled out.

The car underside should therefore be inspected or repaired at regular intervals.



#### Danger of fire and serious personal injuries.

▶ Do not apply undercoating or similar materials on or near the exhaust manifold, exhaust pipes, catalytic converters or heat shields. During driving the substance used for undercoating could overheat and ignite.

If your car is driven frequently in areas where salt has been spread on the roads, the whole engine compartment should be cleaned thoroughly after the winter to prevent salt from causing any lasting damage. A full under-body wash should also be performed at the same time.

After cleaning the engine or repairing a unit, the unprotected parts must be preserved using suitable materials.

#### Door, roof, lid and window seals

▶ Wash dirt (e.g. abrasion, dust, road salts) from all seals regularly using warm soapy water. Do not use any chemical cleaning agents or solvents.

In order to prevent damage to the anti-friction coating, all seals around the doors, side windows, and roof panels must not be treated with car care products.

#### Headlights, lights, plastic rear windows, interior and exterior plastic parts

- Donly use clean water and a little dishwasher detergent to clean plastic parts and surfaces. Do not clean when dry.
  - Use a soft sponge or a soft, lint-free cloth. Gently wipe the surface without applying too much pressure.
  - The Porsche inside window cleaner is also suitable for cleaning plastic surfaces. Follow the cleaning instructions on the container. Never use other chemical cleaners or
- ▶ Rinse cleaned surfaces with clear water.

solvents.

#### **Light alloy wheels**

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

▶ If possible, wash the wheels with a sponge or wash brush about every two weeks. In areas where salt is spread on winter roads or there is a lot of airborne industrial dust, it is best to clean the wheels weekly.

The Porsche Light Alloy Wheel Cleaner (ph-value 9.5) can be used for this pur-

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

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

Every three months, after cleaning, coat the wheels with a car wax or non-corrosive grease (petroleum jelly).

Using a clean cloth thoroughly rub the grease into the surface.

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#### Leather

#### Characteristics and special features

The natural surface markings of leather, e.g. creases, healed scars, insect sting marks, structural differences and slight variations in shade and grain add to the attractiveness of the natural leather product.

A special mention must be made here of natural

For natural leather, carefully selected hides of the highest quality are used. It is not covered completely with dye on production.

"Nature's signature" is therefore easily recogniz-

This fine material is distinguished by an outstanding seating comfort, special suppleness and a typical patina.

#### Leather care and treatment

- ▷ Clean all types of leather regularly to remove fine dust using a soft, damp, white woollen cloth or a commercially available microfiber cloth.
- Remove heavy contamination with Porsche leather cleaner.

Please always follow the instructions for use given on the containers.

#### Caustic cleaners and hard cleaning objects must not be used.

#### Perforated leather must under no circumstances get wet on its reverse side.

Once cleaned, leather (particularly the heavily stressed leather seats) must be treated only with Porsche leather care liquid.

#### Carpets

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



#### Risk of an accident.

▷ Do not obstruct the pedal travel with floor

Do not lie floor mats loosely on the floor.

## Safety belts

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

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

#### **Storing your Porsche**

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

- ▷ Clean your vehicle thoroughly inside and outside. Clean the engine compartment. The under carriage and chassis components should be free of dirt and salt deposits.
- ▶ Fill up the fuel tank.
- ▶ Change the oil and oil filter, and run the engine for several minutes.
- ▶ Increase the tire pressure to 58 psi (4 bar). It is not recommended to lift the vehicle, due to the possibility of corrosion on shock absorber piston shafts.
  - The vehicle should be moved slightly, approximately every four weeks, to prevent flat spot on the tires.
- ▶ Remove ignition key.

#### Climate control

The air conditioning system should be in good working condition and fully charged.

#### Windshield/Headlight washer

▶ Check and correct antifreeze/cleaning solution level as necessary.

#### **Electrical system**

▶ If the battery cables remain connected, it is necessary to connect the trickle charger from time to time.

Do not fast charge the battery.

#### or

▷ Disconnect the battery from the electrical system by removing the ground isolating plug. When the battery is disconnected, the alarm system is deactivated.

Even when the battery is disconnected from the vehicle electrical system, it still discharges.

▷ Charge the battery with a suitable charger every 2 months. The ground isolating plug must be plugged in. Please observe the chapter "BATTERY" on Page 161.

#### Vehicle interior

The interior must be dry, especially in the area of the floor carpets. The use of drying agents (Silica-Gel) is recommended in vehicles with leather interior and in areas with high humidity. The recommended amount is 3 fabric bags of 1.1 lbs. (500 grams) each placed on the floor carpets.

Windows, doors and lids must be closed. The air vents should be opened.

# **Practical Tips, Emergency Service**

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## **Exercise Extreme Caution when Working on your Vehicle**



#### Ignoring the following instructions may cause serious personal injury or death.

- ▶ The engine compartment of any motor vehicle is a potentially hazardous area. If you are not fully familiar with proper repair procedures, do not attempt the adjustments described on the following pages.
- This caution applies to the entire vehicle.
- ▷ Only work on your vehicle outdoors or in a well ventilated area.
- ▶ Ensure that there are no open flames in the area of your vehicle at any time when fuel fumes might be present. Be especially cautious of such devices such as hot water heaters which ignite a flame intermittently.
- ▶ Before working on any part in the engine compartment, turn the engine off and let it cool down sufficiently. Hot engine compartment components can burn skin on contact. The area where the engine compartment is vented behind the rear wing and the tailpipes of the exhaust system can also become very hot.

- ▶ Be alert and cautious around engine at all times while the engine is running. If work has to be performed with the engine running, always set the parking brake, and make sure the shift lever is in neutral position.
- ▶ In particular, be very careful to ensure that items of clothing (ties, shirt, sleeves etc.). iewelry, long hair, hand or fingers cannot get caught in the engine-compartment blower, fan, belts or other moving parts.
  - The radiator and radiator fans are in the front of the car and in the engine compartment. The engine-compartment blowers are mounted in the engine compartment.
  - The fans can start or continue running as a function of temperature, even with the engine switched off.
  - Carry out work in these areas only with the engine off, the ignition switched off, and exercise extreme caution.
- ▶ When the ignition is on, high voltage is present in all wires connected with the ignition system; therefore, exercise extreme caution when working on any part of the engine while the ignition is on or the engine is running.
- ▷ Always support your car with safety stands if it is necessary to work under the car.
- ▶ When working under the car without safety stands but with the wheels on the ground, make sure the car is on level ground, the wheels are blocked, and that the engine cannot be started. Remove the ignition key.

- ▶ Do not smoke or allow an open flame around the battery or fuel. Keep a fire extinguisher in close reach.
- ▷ Incomplete or improper servicing may cause problems in the operation of the car. If in doubt about any servicing, have it done by your authorized Porsche dealer. Improper maintenance during the warranty period may affect your Porsche warranty coverage.
- Supplies of fluids, e.g. engine oil, brake fluid or coolant, are hazardous to your health. Keep these fluids out of children's reach and dispose of them in accordance with the appropriate regulations.
- ▷ Some countries require additional tools and special spare parts to be carried. Please make enquiries before driving abroad.

# Tires/Wheels

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

#### For your safety remember the following:

- Wheel rims are matched to fit your Porsche. Only use Original Porsche wheels. Other wheels will affect the safe operation of your vehicle.
- Only tires with the same make and with the same specification code (e.g. "N0", "N1"...) can be mounted.
- Before you plan on exchanging wheels and tires consult your authorized Porsche dealer.



#### Risk of loss of control and serious personal injury or death.

- ▶ If while driving, your vehicle experiences a sudden vibration or ride disturbance, and/or you suspect that possible damage to your tires or vehicle has occurred, you should immediately reduce your speed without excessive use of the brakes.
- ▶ Stop the vehicle as soon as possible, and inspect the tires. If you cannot determine the cause for the disturbance, have your vehicle towed to the nearest Porsche or tire dealer to have your vehicle or tire(s) inspected.
- ▶ Continuing to operate the vehicle without correction could result in a loss of control and serious personal injury.

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### **Uniform Tire Quality Grading**

Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width.



#### Example

All passenger car tires must conform to Federal Safety Requirements in addition to these grades.

#### Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specific government test course.

For example, a tire graded 150 would wear one and a half (1-1/2) times as well on the government course as a tire graded 100.

The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices and differences in road characteristics and climate.

#### Traction AA, A, B, C

The traction grades, from highest to lowest, are AA, A, B, and C and they represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete.

A tire marked C may have poor traction performance.



The traction grade assigned to this is based on braking (straight-ahead) traction tests and does not include cornering (turned) traction, acceleration, hydroplaning or peak traction characteristics.

#### Temperature A, B, C

The temperature grades are A (the highest). B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

Sustained high temperatures can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure.

The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 109.

Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

# **∕!**\ Danger!

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded.

Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

#### Tire pressures



### Incorrect tire pressure causes increased tire wear and adversely affects road handling.

- ▷ Always use an accurate tire pressure gauge when checking inflation pressures.
- ▷ Do not exceed the maximum tire pressure listed on the tire sidewall. Please observe the chapter "VEHICLE IDENTI-FICATION, TECHNICAL DATA" on Page 177.
- ▷ Cold tire inflation pressure means: all tires must be cold, ambient temperature maximum 68°F/20°C, when adjusting the inflation pres-

Avoid sunlight striking the tires before measuring cold pressures, since the pressures would rise from the temperature influence.

- ▶ Valve caps protect the valve from dust and dirt, and thus from leakage. Always screw caps tightly down. Replace missing caps immediately.
- Do not use commercially available sealant or tire inflating bottles.

# **Tire traction**



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

▶ Reduce speed on wet surfaces to prevent this.

#### Tire life

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

▷ Inspect your tires for wear and damage before driving off. If you notice uneven or substantial wear, wheels might need alignment or tires should be balanced or replaced.

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#### Tire wear

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

When the indicators appear in two or more adjacent grooves, it is time to replace the tires. We recommend, however, that you do not let the tires wear down to this extent.

Worn tires cannot grip the road surface properly and are even less effective on wet roads.

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



Driving on worn tires can result in loss of control of the vehicle and could cause serious personal injuries or death.

- ▷ Do not drive with worn tires or tires showing cuts or bruises as they may lead to sudden deflation and loss of control which could cause severe personal injury.
- Specialized high performance tires on high performance sports cars exhibit more wear than those on a family sedan, or even a high performance sedan.

Therefore, it is important to check your tire pressure and condition at least every two weeks.

If you notice that tires are wearing unevenly, consult your Porsche dealer.

Uneven wear may not always be due to improper wheel alignment. It can be the result of individual driving habits such as cornering at high speeds. If the tire pressure is not checked and adjusted regularly, abnormal tire wear can also occur.

#### Tire care

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

#### Wheel and tire damage, puncture

- ▶ Repair damage to the wheel surface (e.g. scratches, stone damage) immediately so that corrosion does not form.
- ▶ Replace damaged wheels with original wheels.
- ▶ Check tires for imbedded material, cuts, punctures, cracks and bulges (side wall) before driving off.

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

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

Handling inconsistencies may result.

▶ Perform a visual inspection if necessary.

#### **Tire replacements**

If in doubt, contact your Porsche dealer or Porsche Importer of your country. Use only tire makes and types tested by Porsche.

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

Only tires with the same make and with the same specification code (e.g. "NO", "N1"...) can be mounted.

The tires of the Carrera GT are specially adjusted to the characteristics of the vehicle and guarantee optimum driving behavior. Any tires other than those approved by Porsche can impair the driving behavior and safetv.

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

Use tires with "ZR" quality standards. There are currently no standards concerning tire strength at speeds above 150 mph (240 km/h).

Tires should be replaced no less than on one axle at the time.

Only tires of the same make and type must be used. Mixed tires are not permissible.

Initially, new tires do not have their full traction. You should therefore drive at moderate speeds during the first 60 - 120 miles (100 - 200 km).

If new tires are installed only on one axle, a noticeable change in handling occurs due to the different tread depth of the other tires.

This happens especially if only rear tires are replaced. However, this condition disappears as the new tires are broken in.

▶ Please adjust your driving style accordingly.

Installation of new tires should only be done by a qualified tire technician.

#### Valves

Observe the installation and replacement instructions for metal valves.

Use only genuine Porsche metal valves.

▶ Protect the valve inserts against soiling with valve caps. Soiled valve inserts can cause a gradual loss

#### Parking at the curb



of air.

Hard impacts against curbs (or traffic islands) are dangerous and may cause hidden tire damage which is not noticeable until later. Such damage can result in accidents at high speeds causing severe personal injury. Depending on the force of impact, the edge of the rim can also be damaged.

- ▶ If you are in doubt, have the wheel checked by an expert, particularly if you suspect damage on the inside.
- ▶ If you must drive over a curb or other obstacle. drive slowly and at an obtuse angle. Exercise care when parking along curbs.

#### Wheel alignment, wheel balancing

Unbalanced wheels may affect car handling and tire life.

Only the specified weights may be used for wheel balancing.

Self-adhesive weights must not come into contact with cleaning agents, since they could drop off.

Uneven tread wear indicates wheel imbalance. In this event, the vehicle should be checked at an authorized Porsche dealer.



If, during a journey, uneven running or vibrations occur that could be caused by damage to tires or the car, the speed must be reduced immediately, but without braking sharply.

If you continue your trip without having the cause of the fault remedied, you might lose control of your vehicle which could cause severe personal injury.

- Stop the vehicle and check the tires.
- ▶ If no cause for the fault can be found, drive carefully to the nearest authorized Porsche dealer.

#### Removing and storing tires

#### Tires must always remain on the same side of the vehicle.

When wheels are removed, the direction of rotation and position of each wheel should be marked.

#### Example

FR (front right), FL, RR and RL.

Wheels must always be fitted in accordance with their marking and direction of rotation arrow.

The preception that tire durability and performance are immune to the effects of storage and age is unfounded.

Chemical additives, which make the rubber elastic, lose their effectiveness in the course of time and the rubber becomes brittle and cracks.

Therefore, the tires should be inspected from time to time.

#### Note

Under no circumstances should tires older than 4 years be used on your Porsche.

The age of the tire can be obtained from the "DOT" code number. If, for example, the last four numbers read 3203, then the tire was produced in the 32th week of 2003.

▶ Store tires in a cool and dry place.

# Winter driving

There are no snow tires approved for the vehicle.

#### **Snow chains**



#### Risk of damage to body, axle or brake components.

- ▶ Fit snow chains only to the rear wheels. To ensure adequate clearance between chain and body, Porsche recommends only the use of fine-link chains such as those approved by Porsche.
- ▶ Follow instructions issued by the supplier of the chains.

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

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

### **Tire designations**

The designation to be used for ZR tires is e.g. 335/30 ZR 20 (Z = code letter for radial tires forspeeds above 150 mph / 240 km/h).



Front jacking point

# Lifting the Vehicle with a Lifting **Platform or Garage Lift**

- ▶ The car must be raised **only** at the illustrated jacking points.
- ▷ Before raising the vehicle, special jacking plates must be fastened on the jacking points. These plates can be obtained from an authorized Porsche dealer.



Rear jacking point

# **!** Warning!

Serious injury and/or serious damage to the engine or the vehicle may occur, if you lift the vehicle improperly.

- ▶ Never lift the vehicle at any other place than the jacking points.
- ▷ Never lift the vehicle by the engine, transmission or axles.
- ▷ Do not damage any sensitive components in the vicinity of the jacking points.

#### **Platform lift**

Before the car is driven on to a lifting platform, it must be ensured that there is enough space between the lifting platform and the vehicle.

### **Garage lift**

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



Risk of injury. The car may slip off the jack.

- ▶ Make sure that no one is in the vehicle when jacking up and changing a wheel.
- ▷ Always place the car on stable supports if work has to be carried out under the car.

# **Flat Tire**



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

- ▷ If you have a flat tire, move a safe distance off the road. Turn the emergency flasher on and use other warning devices to alert other motorists. Set the parking brake.
- ▷ Do not park your vehicle where it may contact dry grass, brush or other flammable materials. The hot parts of the exaust system could set such materials on fire, thereby causing both property damage and severe or fatal physical injury.
- ▷ Set up a warning triangle at a suitable distance.

A tire repair kit, compressor and pressure tester are located in the left storage compartment of the engine compartment.

- ▶ Please observe the safety and operating instructions on the special sealant bottle with a special Porsche part number and on the compressor - these are essential.
- ▶ Have the sealant changed in accordance with the change intervals stated in the brochure "Maintenance".

#### Important note

Sealing the tire with the tire repair kit is only an emergency repair. Even with the tire airtight, it may be used only for short journeys in an emergency.

The maximum permitted speed is 50 mph (80 km/h).

▷ Do not use commercially available sealant or tire inflating bottles.



# /!\Warning!

#### Risk of accident.

- ▶ Have tires replaced by an authorized Porsche dealer as soon as possible.
- ▷ Avoid hard acceleration and high cornering speeds.



A - Socket for the central nut under the front lid

# Wheel change

- ▶ Have the wheel changed at an authorized Porsche dealer.
- ▷ Do not attempt to loosen central nut with conventional tools.

Because of the large breakaway torque as well as the high tightening torque of the special central nut, workshop equipment is necessary to change a wheel.

(E.g. a torque wrench with 1 inch square, and at least 550 Nm (407 ftlb.)).

# Warning!

#### Risk of damage to the brake discs of the Porsche Ceramic Composite Brake (PCCB).

▶ When changing a wheel, make sure that the brake discs are not damaged.

#### Socket

A suitable socket **A** for loosening or tightening the central nut can be found in the compartment for the roof panels under the front lid.

The socket is not suitable for impact or impulse screwdrivers.

The tools required for changing a wheel (e.g. jack, torque wrench) are not supplied with the car.

The socket is adjusted for the special teeth of the central nut. To avoid damage, only this socket may be used to loosen or tighten the central nut.

- ▶ When positioning the socket, ensure that it engages fully in the teeth of the central nut.
- ▷ Always leave the socket in the compartment for the roof panels so that it is always available in the event of a flat tire.



A - Arrow for loosening the central nut

#### Central nut



#### Risk of wheel separation, resulting in severe personal injury or death.

▶ Follow all instructions concerning the central

The wheels are bolted to the wheel hub by a special central nut.

The central nuts have right-hand thread on the left side of the vehicle and left-hand thread on the right side of the vehicle.

To avoid mixing them up, the central nuts are color-coded:

left side of vehicle - red right side of vehicle - blue

#### **Tightening torque**

Tightening torque of central nut: 550 Nm (407 ftlb.)

#### Loosening the central nut

The direction used to loosen the each nut is displayed by an arrow (A) on the central nut.

#### The central nut can only be loosened or tightened with a special tool as well as a special socket.

- ▶ Always clean the central nuts before fitting.
- ▶ After pushing on the wheel, spray the cone and thread surfaces of the rim. hub. and central nut exclusively with Mc Lube Sailkote High Performance Dry Lubricant. Never grease any parts.

# **/!**\ Warning!

#### Risk of damage and accident when the rim. hub. and central nut are maintained improperly.

- ▷ Only spray the rim, hub, and central nut when the wheel is pushed on. Contact surfaces between the rim and hub must **not** be sprayed.
- ▷ Only spray with Mc Lube Sailkote High Performance Drv Lubricant. If you use greases and lubricants other than the spray authorized by Porsche, your vehicle may no longer perform safely.
- ▶ When fitting the first time, or when replacing the central nut, rim, or wheel nut, the central nut must be tightened and loosened three times with the prescribed torque before the final tightening.
- ▶ Replace damaged central nuts. Only use the original central nuts specially designed for this vehicle type.

#### Note on operation

▶ The Porsche torque multiplier can also be used to loosen and tighten the central nut. Your authorized Porsche dealer will be pleased to advise you.

# **Electrical System**

In order to avoid damage and faults in electrical or electronic systems, electrical accessories should be installed at your authorized Porsche dealer.

▷ Only use accessories authorized by Porsche.



Risk of short circuit and fire. Replacing fuses or relays with the engine running or the ignition on could cause electrical shock.

▷ Disconnect the battery during all work on the electrical system by removing the ground isolating plug.

Please observe the chapter "BATTERY" on Page 161.

#### Relays

Defective **relays** should be changed only by an authorized workshop.

#### Alarm system, central locking

The status of the central locking and alarm system is not changed by disconnecting the battery. When the battery is disconnected, the alarm system ceases to function.

#### **Overload protection**

If the central locking system is operated more than ten times within a minute, further operation is blocked for 30 seconds.

#### Load switch-off after two hours or five days

If the ignition key is removed, loads which are switched on or in standby (e.g. interior light) are automatically switched off after approximately 2 hours.

If the vehicle is not started or unlocked with the remote control within five days, the remote control standby function is switched off (to prevent discharging of the vehicle battery).

- 1. In this case, unlock the driver's door with the key in the door lock. Leave the door closed in order to prevent the alarm system from being triggered.
- 2. Press button 1 on the remote control.

The remote control is now activated again.



# **Operating additional accessories**

The socket is in the glove compartment.

▶ Please observe the chapter "GLOVE COMPARTMENT" on Page 98.

# **Opening the socket**

▶ Touch the socket in the glove compartment (arrow). The socket folds down.

# **Closing the socket**

▶ Fold up the socket and engage.

The socket can be used for electrical accessories (e.g. tire filling pressure compressor or trickle charger).

- ▶ Please observe the chapter "CONNECTING THE TRICKLE CHARGER" on Page 164.
- ▶ Please observe the chapter "STORAGE COMPARTMENTS IN ENGINE COMPARTMENT" on Page 104.

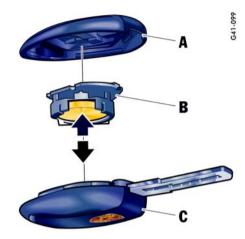
### Maximum power consumption: 150 W.

Do not operate additional accessories for more than 5 minutes with the engine switched off (battery will discharge).

# **Replacing the remote-control battery**

The battery should be changed when the range of the radio remote control becomes smaller or when the GT logo no longer flashes when the remote control is operated.

- 1. Using your finger nail or a small screwdriver, carefully pry out the cover **A** of the key grip.
- 2. Remove the PC board **B** with the battery from the key grip C.



- 3. Replace battery (observe polarity). A spare battery (Lithium CR 2032, 3 volts) is available at your authorized Porsche dealer.
- 4. Insert the PC board **B** with the new battery into the key grip. When doing so, observe the installation position of the PC board.
- 5. Replace the cover and press together firmly.

#### Note

▶ Please dispose batteries in compliance with any and all government regulations.

#### **Fuses**

In order to prevent damage to the electrical system due to short circuits and overloads, the individual circuits are protected by fuses.

One fuse box is located in the driver's footwell under the dashboard and one additional fuse box is located in the engine compartment over the right rear wheel.

The fuse plan and instructions **A** for emergency unlocking of the engine compartment lid can be found on the cover of the fuse box in the driver's footwell.

A plastic gripper and spare fuses are in the upper section of the fuse box in the driver's footwell.

#### Important note

- ▶ If a fuse blows repeatedly, please immediately consult an authorized Porsche dealer, so that the short circuit can be located and corrected.
- ▶ Never try to "repair" fuses: you may cause serious damage to other parts of the electrical system.



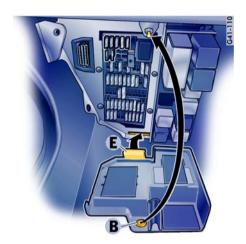
#### Replacing fuses

- 1. Switch off the load with the defective fuse.
- 2. Pull the Tenax stud **B** and pull the cover of the fuse box downward at the finger hole (arrow) and remove.



- 1 Diagnostic socketC Plastic gripD Spare fuses

- 3. Remove the corresponding fuse from its slot to check it using the plastic gripper **C**. A blown fuse can be identified by the melted metal strip.
- 4. Only replace it with a fuse of the same rating.



5. Closing the fuse box:
 Engage the retaining lug **E** of the cover on the frame of the fuse box.
 Fold up the cover until the Tenax stud **B** can be felt to engage.



Fuse box in the engine compartment

There is an additional fuse box in the engine compartment over the right rear wheel.

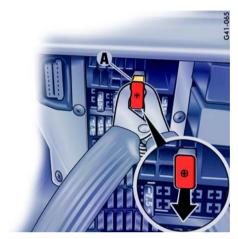
To open, unscrew the screws **F** and open the cov-

### **Emergency unlocking of the engine** compartment lid

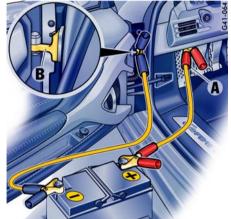
If the battery is discharged, the lid can be opened only with the aid of a jump box or donor battery.

#### Unlocking lid

- 1. Use the key to unlock the vehicle at the door
- 2. Remove plastic cover over the fuse box in the driver's footwell.
- 3. Pull out positive terminal **A** in the fuse box.
- 4. Use a jumper cable to connect the positive terminal of the jump box or donor battery with positive terminal A in the fuse box.



- 5. Use the second jumper cable to connect the negative terminal of the jump box or donor battery to the upper hinge **B** of the driver's door.
- 6. Unlock the engine compartment lid with the switch behind the parking brake.



- 7. Disconnect the negative cable first, then the positive cable.
- 8. Push positive terminal **A** into the fuse box and push on the plastic fuse box cover.

#### Note

#### The engine must not be started with this method.

▶ Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 167.

# **Battery**



#### Risk of short circuit and fire.

- ▷ Observe all warnings on the battery.
- ▷ Disconnect the battery during all work on the electrical system by removing the ground isolating plug.
- ▷ Do not lay tools or other metal objects on the battery as they could cause a short circuit across the battery terminal.

#### Hydrogen gas generated by the battery could cause an explosion, resulting in severe personal injuries.

- ▷ Do not expose the battery to an open flame. electrical spark or a lit cigarette.
- ▷ Do not wipe battery with a dry cloth.

#### Risk of severe personal injury and damage to the fabric, metal or paint.

- ▶ Wear eve protection.
- ▷ Do not allow battery acid to come in contact with your skin, eyes, fabric or painted surfaces.

- ▶ If you get electrolyte, which is an acid, in your eves or on your skin, immediately rinse with cold water for several minutes and call a doctor.
- Spilled electrolyte must be rinsed off at once with a solution of baking soda and water to neutralize the acid.

#### Battery posts, terminals and related accessories contain lead and lead compounds. chemicals known to the State of California to cause cancer and reproductive harm.

Always protect your skin by washing thoroughly with soap and water.

#### Risk of damage to alternator and electronic control units.

- ▷ Do not disconnect the battery or ground isolating plug while the engine is running. This also applies to cars equipped with a battery main switch.
- ▶ Never drive the car with a disconnected bat-

#### Risk of caustic burns from escaping acid.

- ▶ Keep vent caps on to avoid spillage.
- ▷ Do not tilt the battery.

#### Removing and installing battery

The battery is difficult to access because of the special vehicle concept. It is located in front of the right rear wheel.



#### Danger of injury and risk of damage to vehicle components when removing and installing the battery.

▶ It is strongly recommended that the battery is to be removed and installed at an authorized Porsche dealer only.

However, should it be necessary to interrupt the power supply, the battery can be disconnected from the vehicle electrical system by releasing the ground isolating plug.

▶ Please observe the chapter "DISCONNECTING THE BATTERY FROM THE VEHICLE ELECTRI-CAL SYSTEM" on Page 166.

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### Charge state

A well charged battery will not only prevent starting problems but will also last longer.

#### In order to avoid discharging the battery unintentionally:

- ▷ Switch off unnecessary electrical loads in city traffic, on short trips or in a line or traffic.
- ▷ Always remove the ignition key from the ignition lock when leaving the car.
- ▷ Avoid using the Porsche Online Pro when the engine is not running.

#### **Battery charging**

Automotive batteries loose their efficiency when not in use.

We recommend that the battery voltage be tested by your Porsche dealer who has the appropriate equipment.

If the car is not driven for prolonged periods, the battery must be charged at least every 2 months. A discharged battery allows rapid formation of sulfates, leading to premature deterioration of the plates.

▶ Please observe the chapter "CONNECTING THE TRICKLE CHARGER" on Page 164.

# '!\ Danger!

#### Hydrogen gas generated by the battery could cause an explosion, resulting in severe personal injuries.

- ▷ Charge battery in a well ventilated area.
- ▶ Never charge a frozen battery. It may explode because of gas trapped in the ice. Allow a frozen battery to thaw out first.
- ▶ If you get electrolyte, which is an acid, in your eyes or on your skin, immediately rinse with cold water for several minutes and call a doctor.

#### Slow battery charging



#### Risk of damage, if the charger is not connected to the jump lead starting points provided.

- ▷ Do not use carbon fiber parts, surfaces, or running-gear parts as the ground conductor. Only connect the charger to the jump lead starting points provided.
- 1. Pay attention to all warnings and follow instructions that come with your battery charger.
- 2. When charging, ensure adequate ventilation.
- 3. Ensure that charger is switched off danger of short circuit!

- 4. The ground isolating plug must be plugged in.
- 5. Connect charger cables to the jump lead starting points.

# Charger cables must be connected POSITIVE (+) to POSITIVE (+) and NEGATIVE (-) to NEGATIVE (-).

Please observe the chapter "EMERGENCY STARTING WITH JUMPER CABLES" on Page 167.

- 6. Switch on charger. Normally, a battery should be charged at no more than 10 percent of its rated capacity. Rated capacity of the battery in your vehicle is listed on the battery housing.
- 7. After charging, turn off charger and disconnect charger cables in reverse order.

# Winter operation

The capacity and ability of the battery to store power decreases at low outside temperatures. Additionally, more power is consumed while starting, and the headlights, heater, etc., are used more frequently.

▶ Let your Porsche dealer test the battery before winter sets in.

The battery will discharge more quickly if your vehicle is not driven on a daily basis over a distance of several miles. The more often you drive your vehicle, and the longer the distance driven on each trip, the more opportunity the vehicle's charging system will have to recharge the batteries.

### **Replacing battery**

The service life of the battery is subject to normal wear; it depends greatly on care, climatic conditions, and driving conditions (distances, loads).

- ▷ Only use an original Porsche battery, with the correct part number, as a replacement.
- ▶ Please observe the disposal instructions for batteries.

### **Battery care**

The battery may only be worked on by an authorized Porsche dealer.

▶ To prevent premature discharging of the battery, the trickle charger should be connected if the vehicle stands for longer periods of time (10 days or longer).

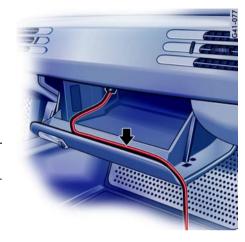
 $\triangleright$   $\triangleright$   $\triangleright$ 

# **Connecting the trickle charger**



Risk of short circuit and risk of damage to vehicle components and trickle charger if the cables for the trickle charger are routed incorrectly. The cables can be pinched.

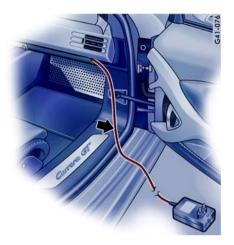
- ▶ Route the cabels from the vehicle only at the prescribed locations.
- ▶ The ground isolating plug must be plugged in.
- ▶ Please observe the separate operating instructions from the trickle charger manufacturer.



- 1. Close any open windows and lids.
- 2. Switch ignition off.
- 3. Open the glove compartment.
- 4. Press the socket in the glove compartment. The socket folds down.
- 5. Plug the trickle charger into the socket.
- 6. Route the cable above the glove compartment cover (arrow).



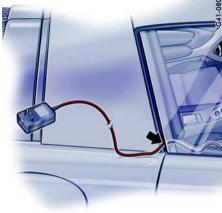
- 7. Route the cable from the glove compartment at the position shown (arrow).
- 8. Close the glove compartment.



9. Route the cable out of the vehicle.

#### Option 1

(arrow).



# Option 2

window and the seal (arrow).

- 10.Close the vehicle doors.
- 11.Only plug in the trickle charger into the wall outlet after it has been correctly connected up to the socket in the clove compartment.

# Disconnecting the trickle charger

- 1. First unplug the trickle charger from the wall outlet.
- 2. Then pull the trickle charger out of the socket in the glove compartment.

## **Disconnecting the battery from the** vehicle electrical system

The battery may only be removed and installed by an authorized Porsche dealer because it is especially difficult to access.

However, should it be necessary to interrupt the power supply, the battery can be disconnected from the vehicle electrical system by removing the ground isolating plug.

The ground isolating plug should be removed:

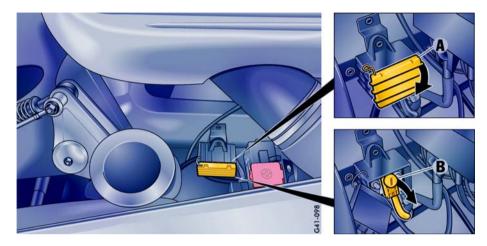
- if the vehicle stands for several weeks,
- if there is damage to electrical equipment.

#### Note

When the power supply is interrupted, the alarm system ceases to function!

If the engine compartment lid is closed when the power supply is interrupted, it can only be unlocked by connecting a donor battery.

▶ Please observe the chapter "EMERGENCY UNLOCKING OF THE ENGINE COMPARTMENT LID" on Page 160.



- 1. Open engine compartment lid. Please observe the chapter "ENGINE COMPARTMENT LID" on Page 102.
- 2. Unclip the cover **A** from the ground isolating point.
- 3. Remove the ground isolating plug B. The electrical connection is now interrupted.

#### Connecting the battery

- 1. Connect the ground isolating plug.
- 2. Push cover onto the ground isolating point.
- 3. Enter the theft code for the Porsche Online Pro.

#### Tip on driving

Disconnecting the battery can have temporary effects on the driving and idling characteristics after the car is started again.

# **Emergency Starting with Jumper** Cables

If the battery is discharged, e.g. in winter or after the car has been parked for a long time, the battery of another car can be used for starting with the help of jumper cables.

Make sure the voltage of both batteries is the

The capacity (Ampere hours, Ah) of the booster battery must not be substantially less than that of the discharged battery.

The discharged battery must be correctly connected to the vehicle's electrical system.

- ▶ Please observe the chapter "BATTERY" on Page 161.
- ▶ Please observe the chapter "EMERGENCY UN-LOCKING OF THE FNGINE COMPARTMENT LID" on Page 160.

#### Note

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

# ∕!\ Warning!

#### Risk of damage and serious personal injury due to short circuit.

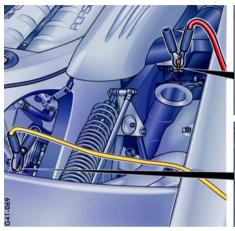
- ▶ Use only iumper cables of adequate diameter cross-section and fitted with completely insulated alligator clips.
- ▶ Follow all warnings and instructions of the jumper cable manufacturer.
- ▶ When connecting jumper cables, make sure that they cannot get caught in any moving parts in the engine compartment. The jumper cables must be long enough so that neither vehicles nor cables touch another.
- ▶ The vehicles must not be in contact, otherwise current might flow as soon as the positive terminals are connected.
- ▶ The cable clamps must not be allowed to contact each other when one end of the jumper cables are connected to a battery.
- ▶ Ensure that tools or conductive iewelery (rings. chains, watch straps) do not come into contact with the positive jumper cable or the positive battery post.
- ▷ Improper hook-up of jumper cables can ruin the alternator. Be careful not to accidentally reverse positive with negative polarity.

#### Danger of caustic burns.

Do not lean over the battery.

#### Danger of gas explosion.

- ▷ Improper use of booster battery to start a vehicle may cause an explosion, resulting in severe personal injuries.
- ▶ Keep sources of ignition away from the battery, e.g. open flame, burning cigarettes or sparking due to cable contact or welding work.
- ▶ A discharged battery can freeze even at 23°F/-5°C. Before connecting jumper cables, a frozen battery must be thawed out.









#### Risk of damage to the structure of the carbon fiber chassis/body, if the jumper cables are not connected to the jump starting points provided.

▷ Do not use carbon fiber parts, surfaces, running-gear parts or metal inserts in the carbon fiber as the ground conductor. Only connect jumper cabels to the jump starting points provided.

- + The positive terminal for jump starting is located between the right air cleaner and fuse box.
- The grounding point for jump starting is located on the transmission behind the right drive shaft.

#### Connect jumper cables in the following sequence:

1. On a vehicle with a discharged battery: turn off all consumers and accessories, move the gear shift lever into the neutral position and set the parking brake.

- 2. Open the cap of the positive terminal for jump starting (+).
- 3. Attach the **positive cable** first to the positive terminal for jump starting (+), then to the positive terminal of the booster bat-
- 4. Connect the **negative cable** first to the negative terminal of the booster battery, then to the grounding point for jump starting (-).
- 5. Run the engine of the booster car at a higher speed.
- 6. Start the engine. An attempted start using jumper cables should not last more than 15 seconds. Then allow a waiting period of at least one minute.
- 7. With the engine running, disconnect both jumper cables in reverse order. Close the lid of the jump start box.

#### Note

A completely discharged battery can have temporary effects on the driving and idling characteristics after the car is started again.

# **Replacing bulbs**

The headlights and bulbs are difficult to access because of the special vehicle design. Bulbs should therefore only be changed by an authorized Porsche dealer.



#### Risk of short circuit.

▷ Always switch off the relevant consumer when changing bulbs.

#### Risk of injury. The headlights are under high voltage when installed.

- ▶ Have the bulbs changed and the headlights worked on by an authorized Porsche dealer.
- ▷ Be careful during all work in the area of the headlights.

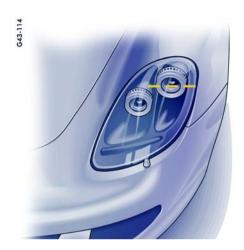
#### Risk of damage. Bulbs of a higher wattage can damage the lamp housing.

- ▶ Use only bulbs authorized by Porsche.
- ▷ Always carry spare bulbs with you. In certain countries, carrying spare bulbs is mandatory.
- ▶ Bulbs must be clean and free from grease. Never touch bulbs with your bare hands. Use a cloth or soft paper.



#### Risk of damage to headlights due to excessive temperatures and abrasion.

- ▶ Attach no coverings (e.g. films, "stone guards") in the area of the headlights.
- ▶ Use soapy water only to clean light lenses and plastic headlight lenses. In no case may chemical cleaners or other volatile cleaning fluids be used.
- ▶ To prevent scratches, do not rub with a dry or merely moist cloth, tissue or insect sponges.



# **Adjusting Headlights**

Please observe the chapter "REPLACING BULBS" on Page 169.

#### Adjustment

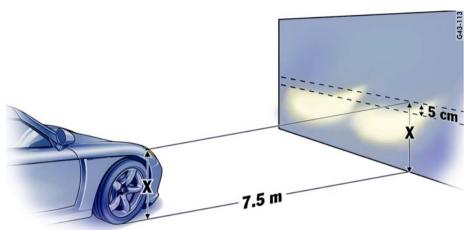
The adjustment of the headlights should only be done in a specialist workshop with suitable adjustment equipment.

The adjustment is made with the vehicle ready to drive and the fuel tank completely filled.

The driver's seat must be loaded by a person or a 165 lbs. (75 kg) weight and the tire pressures must meet the prescribed values.

After being loaded, the car must be rolled a few meters so that the suspension can settle.

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For checking the headlight adjustment, the vertical position of the cutoff of the lowbeam (see fig.) has to be projected on a vertical screen (wall) in distance of 7.5 m (24.6 ft.) from the front lens of the headlamp.

The correct position of the cutoff is 5 cm (2.0 in.) at 7.5 m or 24.6 ft. (0.4°) below a horizontal line,  $\mathbf{x}$  cm from ground to the center of the headlamp lens.

Lateral adjustment of the headlights should be carried out at a specialist workshop with an optical adjustment unit.

#### Distance

Visual aim shall be performed at not less than 7.5 m (this value is a rounded down conversion from the 25-foot distance typical of field aim using a screen). The 7.5 m (24.6 ft.) distance is measured from the headlamp lens to the viewing screen.

#### Floor

The surface upon which the vehicle rests is flat and approximately level.

#### Screen

The screen upon which headlamp beams are projected is perpendicular to the floor and the vehicle's longitudinal axis, flat, uniformly light in color, unobstructed, and wide and high enough to accommodate the vehicle beam patterns to be aimed.

The screen should be wide enough to provide at least 1 m (3.3 ft.) of space outboard of the vehicle's headlamp spacing.



A - Opening for headlight vertical adjustment

#### Vertical adjustment

The opening **A** for vertical adjustment is located in the wheel well in front of the relevant front wheel.

- ▶ To adjust the headlights, use a 5 mm Allen key with a long shaft and ball head.
- b turn clockwise = beam moves down turn counter-clockwise = beam moves up

#### Note

▷ Do not alter the lateral adjustment.

# **Towing. Recovery**

Certain area statutes and local ordinances prohibit towing with a chain, rope or even a tow bar. In addition, damage to your vehicle may result from improper procedures.

Consult your authorized Porsche dealer for details.

#### **Vehicle towing**

A flatbed car carrier is the preferred type of towing equipment to be used on Porsche vehicles. Under certain circumstances, wheel lifts may be used when the vehicle will not roll.

Crane recovery using wheel claws is not possible because of tire dimensions.



#### Risk of damage.

Because of technical specifications (e.g. ground clearance, angle of inclination, tire size) there is the danger that the vehicle could be damaged due to improper handling when transporting.

- ▷ Only transport the vehicle with great care.
- ▶ The vehicle must only be transported with all four wheels touching the ground at the same time.
- Special provisions may be required.



# **Towing eye, front**

The towing eye is contained in the left storage compartment of the engine compartment in the tool kit.

# Caution!

#### Risk of damage to the vehicle.

- ▶ Use the towing eye only for an emergency to remove the vehicle off the road or to pull the vehicle onto the towing equipment if the vehicle will roll freely. Under no circumstances is the vehicle to be secured using the towing eye.
- Never use the towing eye as the primary attachment to tow this vehicle.
- 1. Carefully remove the plastic cap beside the license plate with an appropriate tool using care not to damage the painted surface on either the bumper or the plastic cap.
- 2. Screw the towing eye into the hole until it is fully seated.



# Recovery eye, rear

The recovery eye with the fastening screws is in the left storage compartment of the engine compartment in the tool kit.

# Caution!

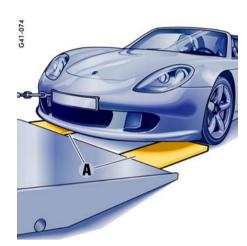
### Risk of damage to the vehicle.

- ▶ Use the recovery eye only for an emergency to extricate the vehicle. Under no circumstances is the vehicle to be secured using the recovery
- ▶ Never use the recovery eye to tow any other vehicle.
- ▶ The recovery eye must be attached to the underside panel on the unit carrier (figure) using the screws provided.

# Tightening torque

Tightening torque of the screws: 33 Nm (24 ftlb)

 $\triangleright$   $\triangleright$   $\triangleright$ 



### **Pulling vehicle onto flatbed carrier**

When loading the vehicle, make sure the vehicle is on an even surface.

When loading a vehicle with defective tires, it is highly recommended to use additional suitable ramping because of reduced ground clearance.

- Lower the flatbed of the car carrier completely, fasten the winch wire rope to the front towing eye.
- Position the necessary wooden ramps A at the base of the flatbed in the track width of the vehicle to reduce the angle of the pull.
- 3. Reel in the winch wire rope and check the underside of the vehicle for any interference.
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- Tighten the winch wire rope slowly and observe the underside of the vehicle and the front spoiler for possible contact with the ground or the bed.
- 5. While loading, adjust the bed angle as necessary to avoid contacting the vehicle.
- 6. Secure the vehicle on the car carrier using nylon wheel strap tie-downs.

# Lowering the vehicle from the car carrier bed

- Lower the flatbed completely, and position ramping in the track width of the vehicle at the edge of the bed.
- Slowly unroll the winch wire rope under tension and carefully lower the vehicle. While doing so, observe the underside of the vehicle and the front spoiler for possible contact with the ground or the bed.
- 3. When the rear wheels touch the ground, adjust the bed angle as necessary to avoid contacting the vehicle.
- After the vehicle has been lowered completely, carefully remove the winch line hook and towing eye. Return the towing eye to the left storage compartment of the engine compartment.



## Tying down vehicle on flatbed

- 1. Carefully feed towing straps through the opening in the rear wheels.
  - Make sure metal parts of straps do not dam-
  - Make sure the strap is flat over the rim bead. Make sure brake backing plate is not damaged.
- 2. Secure straps to rear of flatbed.
- 3. Reel in winch wire rope only far enough to tension tie-down straps.

- 4. Carefully feed towing straps through the opening in the front wheels.
  - Make sure metal parts of straps do not damage rim.
  - Make sure the strap is flat over the rim bead. Make sure brake backing plate is not damaged.
- 5. Secure straps to front of flatbed.
- 6. Release tension on winch wire rope, but do not disconnect.
  - Use winch line as a safety cable.

# **Vehicle Identification, Technical Data**



This label contains the following information:

- 1. Vehicle Identification No.
- 2. Type/Type description
- 3. Engine code/Transmission code
- 4. Paint No./Interior
- 5. Optional equipment

A duplicate of this label is in your Maintenance Booklet.

#### Note

This data bank cannot be re-ordered if it is lost or damaged.



### Vehicle identification number

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

The vehicle identification number is also under the passenger's seat.

# **Vehicle Identification**

When ordering spare parts or making inquiries, please always quote the vehicle identification number.

### **Vehicle identification label**

Vehicle identification label is attached under the lining of the compartment for the roof panels on the cover of the brake fluid reservoir. It contains all important data about your car.



# Safety compliance sticker

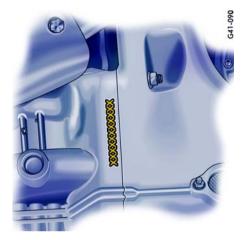
The safety compliance sticker is your assurance that your new Porsche complies with all applicable Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was manufactured.

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



### Paint data

The paint data plate is attached to the front side wall under the light in the compartment for the roof panels.



# **Engine number**

The engine number is stamped on the underside of the crankcase.

# **Technical Data**

# **Engine data**

Type M 80

Liquid cooled V10 naturally- aspirated engine

Number of cylinders 10

Bore 3.86 in./98 mm Stroke 2.99 in./76 mm Cubic capacity 349.8 cu. in./5733 cm<sup>3</sup>

Compression ratio 12:1

Net-horsepower, SAE J 1349 605 hp/450 kW at crankshaft speed 8000 rpm

Net torque, SAE J 1349 435 ft. lb./590 Nm at crankshaft speed 5750 rpm
Alternator 2100 W/150 A

Engine control Stationary high-voltage distribution, sequential injection,

cylinder-selective knock-control, stereo oxygen sensor closed-loop control, diagnostic system,

4 overhead camshafts, Porsche VarioCam

# **Driving Performance\***

Maximum speed 205 mph/330 km/h Acceleration 0 – 100 km/h (62 mph) 3.9 seconds

<sup>\*</sup> At DIN empty weight and half load, without performance-inhibiting extra equipment

# **Transmission**

1st gear	3.20:1
2nd gear	1.87 : 1
3rd gear	1.36:1
4th gear	1.07:1
5th gear	0.90:1
6th gear	0.75:1
Reverse	2.19:1
Final drive ratio	4.44:1

# **Tire Pressures for cold tires**

Front 32 psi (2.2 bar) Rear 32 psi (2.2 bar)

These tire pressures apply only to the tire makes and types approved by Porsche. Please observe the chapter "TIRES/WHEELS" on Page 145.

### **Tires, Rims, Tracks**

		Tire	Rim	Rim offset	Track
Tires	front	265/35 ZR 19 (89)	9.5 J x 19	6 mm	63.46 in./1612 mm
	rear	335/30 ZR 20 (109)	12.5 J x 20	39 mm	62.48 in./1587 mm

The load capacity coefficient (e.g. "89") is a minimum requirement.



Installation of sizes not authorized by Porsche may have a dangerous effect on the driving stability and could result in severe personal injury or death.

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

Tire and rim sizes Extensive tests are performed before specific tires and wheels are approved by Porsche. Your Porsche dealer has information about approved tires and wheels and is happy to assist you.

If aftermarket tires and/or wheels are installed which are not approved by Porsche, the vehicle's roadability and handling characteristics might be impaired. Since Porsche has no data on such combinations, Porsche cannot stand behind the safety or durability of these aftermarket combinations.

#### **Snow chains**

Can be mounted only on the rear wheels; maximum speed 30 mph/50 km/h.

Use only Porsche authorized fine-link cross-type or edge chains.

#### **Capacities**

Use only fluids and fuels authorized by Porsche. Your authorized Porsche dealer will gladly advise you. Your Porsche has been designed so that it is not necessary to mix any additives with oils or fuels.

**Engine** Oil change quantity without oil filter approx. 10.6 quarts/10 liters

Oil change quantity with oil filter approx. 11.2 quarts/10.5 liters

Please observe the chapter "ENGINE OIL" on Page 118.

**Coolant** approx. 7.39 U.S. gallons/28 liters

**Manual transmission** 

**and differential** 4.3 quarts/4 liters transmission oil Mobilube 1SHG

**Fuel tank** approx. 24.3 U.S. gallons/92 liters

**Fuel quality** Your engine is designed to provide optimum performance and fuel economy using

unleaded premium fuel with an octane rating of 98 RON (93 CLC or AKI).

Porsche therefore recommends the use of these fuels in your vehicle.

Porsche also recognizes that these fuels may not always be available. Be assured that your vehicle

will operate properly on unleaded premium fuels with octane numbers of at least 95 RON (90 CLC or AKI),

since the engine's "Electronic Oktane™ knock control" will adapt the ignition timing, if necessary.

**Power steering** approx. 1.17 quarts/1.1 liter hydraulic fluid Pentosin CHF 11 S<sup>®</sup>

**Brake fluid** 1.38 quarts/1.3 liters; use only Original Porsche brake fluid.

**Windshield washer** approx. 4.79 quarts/4.5 liters

# Weights

Empty weight (depending on equipment) 3042 lbs. to 3186 lbs. 1380 kg to 1445 kg Maximum gross weight 3605 lbs./1635 kg Maximum axle load, front\* 1576 lbs./715 kg Maximum axle load, rear\* 2061 lbs./935 kg

The maximum gross weight must not be exceeded.

Note: If additional accessories are installed, the useful load will be correspondingly less.

### **Dimensions**

Length 181.61 in./4613 mm Width 75.63 in./1921 mm Height 45.91 in./1166 mm Wheelbase 107.48 in./2730 mm 3.39 in./86 mm Ground clearance Turning circle 42.3 ft./12.9 m

# **Diagrams**

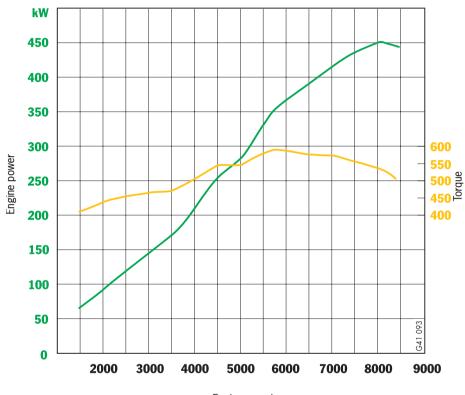
### **Acceleration diagram**

Values have been determined at DIN empty weight and with a 50 % load without additional equipment.

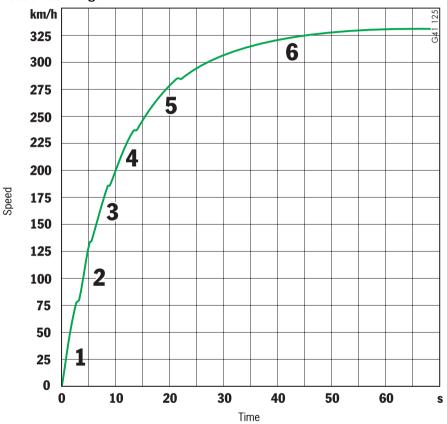
## Transmission diagram

The transmission diagram is based on standard values on the basis of a mean effective scrub radius. Changes of the scrub radius, the tire tolerance, wear and tear, deviating country equipment and tire slip have not been taken into account.

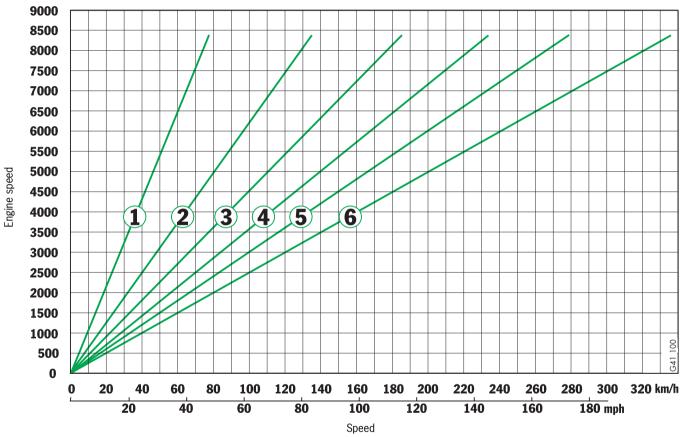
# **Engine diagram at full power**



# Acceleration diagram



# **Transmission diagram**



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