



PORSCHE

914 1.8/2.0

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MAINTENANCE

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AND ADJUSTMENTS

## Attention:

If you perform any work on your vehicle yourself, you should apply utmost care so that the operating safety is ensured to its full extent.

However, as a matter of principle, we would recommend to have all necessary work done by an authorized service station. The training and experience of their shop personnel, technical information and special tools and devices form a perfect base for an unobjectionable execution of the work required.

All essential values for readjustment and repair work may be taken from the chapter "Technical Data".

**The jack furnished with the vehicle may exclusively be used for lifting the vehicle for the purpose of changing wheels. If other work is performed, particularly underneath the vehicle, special devices particularly designed for this purpose must be used, also in the interest of your own safety.**

**For engine work the engine should be stopped and cooled down.**

## Tool Kit

The tool kit is standard equipment. You will find it in a bag in the front luggage compartment.

Kit Contents  
(subject to change)

Wheel bolt wrench with breaker bar

Screwdriver set with common handle Rear towing eye.



## Jack

The jack is underneath the boot lid in the rear luggage compartment fastened to the partition by two quick-action locks.



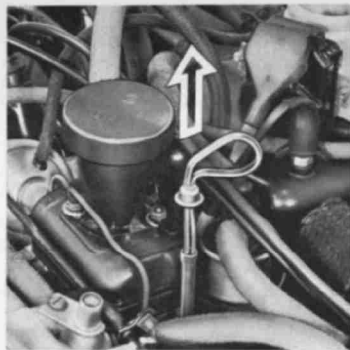
### Checking Engine Oil Level

The oil level should be between the two marks on the dipstick, and must never drop below the lower mark. An exact reading is only possible if the car is level. Do not check the oil immediately after switching off the engine – the oil needs a few minutes to flow back into the crankcase. When operating the vehicle under extreme conditions such as prolonged highspeed driving in summer, the oil level should be kept just under the upper mark.

Pull out dipstick and wipe with a clean rag.

Push in dipstick to stop, remove and read oil level.

The difference between the min. and max. marks on the dipstick is approx 1,48 US pints (1,22 Imp. pints).

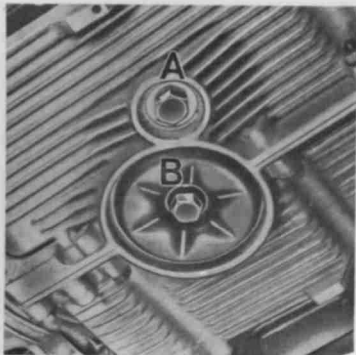


### Adding Engine Oil

Remove oil filler cap.

Top up with brand name HD oil (see page 80). Check oil level on dipstick – upper mark should not be exceeded.

Replace the cap and tighten.



## Changing Engine Oil

The quantities required for an oil change are:  
with oil filter cartridge change approx. 7.4 US pints/6.2 Imp. pints;

- without oil filter cartridge change approx. 6.3 US pints/5.3 Imp. pints.

Oil should be drained by removing plug (A) only when the engine is warm. The engine does not need to be flushed, but the oil strainer should be removed and cleaned every 18 000 miles. This is done by removing the center nut (B).

Gaskets and sealing rings should always be replaced.

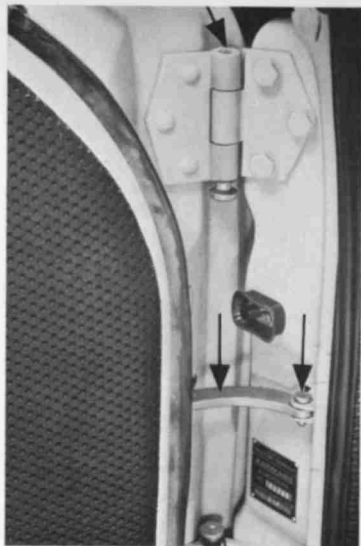
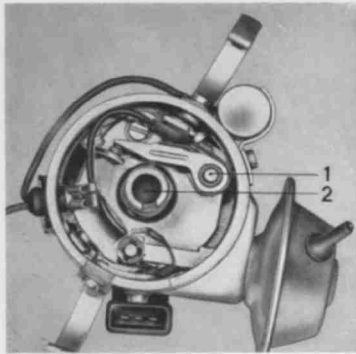
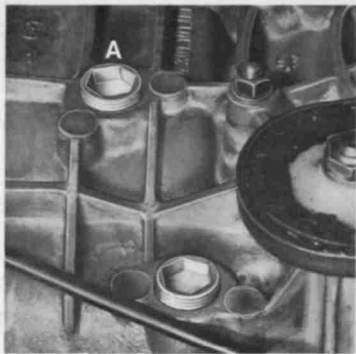
A torque wrench is required to tighten the center nut of the oil strainer. The torque value is 7.2–9.4 ft. lbs. This value is very important. **Do not overtighten.**

A special wrench is necessary for removing and installing the oil filter properly.

Under normal conditions it is unnecessary and uneconomical to change oil at shorter intervals than 3000 miles.

We only recommend shorter oil change intervals, every 1500 miles, in winter when

most driving is done on short trips or in the city. Should only a few hundred miles per month be driven under these conditions, then the oil should be changed every 6 to 8 weeks. In countries with an arctic climate, with temperatures below  $-15^{\circ}\text{F}$ , the oil should be changed every 800 miles.



### Checking Transmission Oil Level

1. Clean filler plug outside and unscrew.
2. With the vehicle in level position the oil should reach up to the edge of the filler hole.
3. Clean filler plug and reinstall.

For replenishing, use the oil quality prescribed under "Technical Data".

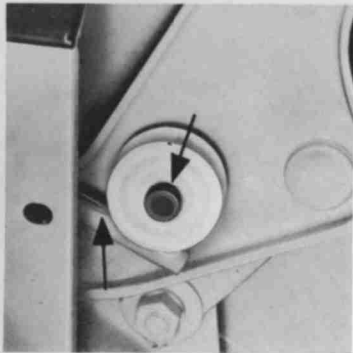
### Lubricating Distributor Cam

1. Remove distributor cap and pull off rotor arm.
2. Apply a micro-thin layer of acid-free high melting point grease to the cam track.
3. Lubricate bearings of contact breaker (1) and lube felt of distributor shaft (2) with a drop of engine oil.

When lubricating the distributor cam, ensure that no grease sticks to the breaker contact surfaces, which would cause misfiring.

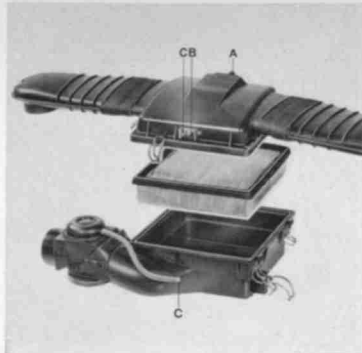
### Lubricating Door Hinges and Strikers

Apply some oil in regular intervals to the points marked by an arrow. This will prevent squeaks and hard-moving doors,



### Lubricating Bonnet Hinge Guide Roller

Apply some oil in regular intervals to the points marked by an arrow (roller axis and spring track). This ensures easy operation.



Type 914 - 1.8

### Air Cleaner

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

#### Note

When removing air cleaner hoses, mark each hose so that they will be properly reconnected.

Hoses connections: (Type 914 - 1.8)

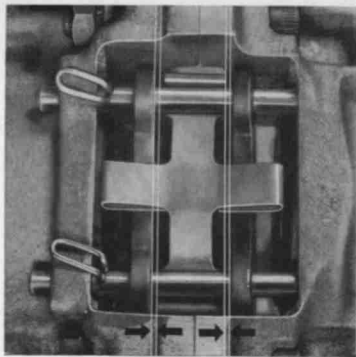
- A = Crankcase venting
- B = Compensation Line



Type 914 - 2.0

### Porsche 914 - 2.0

1. Remove the following hoses from the top of the air cleaner:
  - a) Overrun air supply
  - b) Fuel tank venting (USA)
  - c) Supplementary air
  - d) Crankcase venting.
2. Loosen slotted screw and release three clips.
3. Remove top part of air cleaner.
4. Remove filter element and clean the inside of housing with an oiled cloth. Do not use frayed rags or similar materials.
5. Tighten slotted screw and reconnect all hoses properly.



## Brake System

### Checking Brake Pad Wear

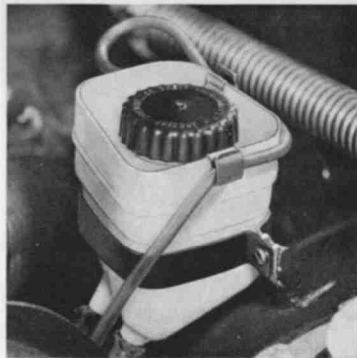
The brake pad wear primarily depends on the stress applied to them, on the way of driving and on the road conditions. They wear faster when the roads are wet and dirty (wintertime deicing).

### Attention!

Do not hesitate to see the next service station if you feel that something is wrong with your brakes.

During every service work and with every change of the wheels, the thickness of the pads must be visually checked. Some of the wear material must be left between the pressure spring and the pad carrier plate (cf. picture). The permissible wear limit has been reached when the carrier plate contacts the spring (min. pad thickness app. 2 mm). The pads must be replaced by a service station prior to having reached this degree of wear.

We recommend to check the pads before you go on a longer trip.



## Brake Fluid

The brake fluid level in the container must be regularly checked and replenished, if necessary, by a fluid meeting the SAE-specification J 1703a.

The no-load stroke of the brake pedal remains constant if the brake is properly bled, owing to the automatic adjustment; the no-load stroke is about 30–50 per cent of the total pedal travel. After new brake pads have been installed, the pedal travel is somewhat longer than normal during the break-in period.

### Attention!

Brake fluid attacks the vehicle paint.

## Please note the following:

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For technical reasons your VW-Porsche has been equipped with a wheel centering at the front axle. That's why your car may only be used with the rims mounted in series. In case you would like to furnish your vehicle with different rims and tires we recommend you to contact your local VW-Porsche dealer for further advice.

## Tire Pressures

The tires should be inspected for proper pressure and unusual wear or damage such as cuts, broken cords and punctures as part of every maintenance inspection, before departure on long trips and at every given opportunity.

Check pressure when the tires are still cold.

### Nominal tire pressures:

**Front - 26 psi (1,8 atm)**

**Rear - 29 psi (2,0 atm)**

### Snow tire pressure:

**Front - 29 psi (2,0 atm)**

**Rear - 32 psi (2,2 atm)**

### Caution!

The tire pressure will increase as temperatures rise. Never let air out of warm tires to meet cold tire specifications.



## Spare Wheel

The spare wheel is located in the front luggage compartment. If it is checked regularly in connection with the windshield washer, it will always have a pressure of 29–43 psi. As a result it is always inflated to at least the pressure required for the rear wheel. To check the pressure of the spare tire disconnect the hose at the windshield washer container (see page 33). If the spare tire is to be used disconnect hose at tire valve. Be sure to adjust the tire pressure to specifications.

The front luggage compartment is also suited to receive awkward goods if you remove the spare tyre and place it into the rear luggage compartment. On the left side in the compartment floor you will find a threaded bush for mounting the spare tyre.

Essentially the wheel is fastened as in the front compartment. The mat is cut out for the fastening screw. Please note that with this wheel arrangement your windshield washer is operable only for a limited period of time in view of the fact that the water tank contains only a limited quantity of pressure.

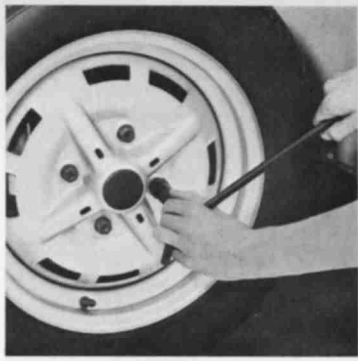
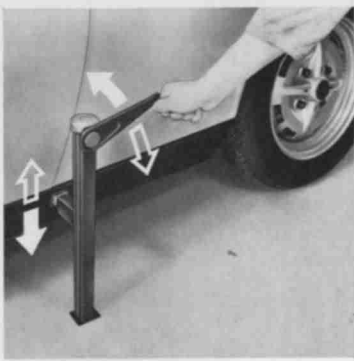
## Changing a Wheel

**If you have a flat tire, move off the roadway. Turn on the emergency flasher. In addition, mark the position of your car with flares or other warning devices to alert other motorists.**

**Before you change a wheel, be sure the ground is level and firm, especially near the rear wheels where the jack ports are.**

**Set the parking brake and block the wheels opposite the defective wheel on the other side of the car.**





For a more efficient and safe changing of a flat tire, observe the following steps:

1. Take out tools, jack and spare wheel. Remove plug from jack socket.
2. Loosen and remove with a screw driver the plastic covers from the wheel nuts (see illustration).
3. Loosen all wheel nuts counterclockwise about one turn with the wheel nuts wrench. Do not yet remove the nuts.
4. Securely insert the jack completely in the jack port. There is one for each side. It is under the body toward the rear and is used for front and rear wheel changing.

**Never jack the car up by the bumper or the body.**

Provide for a firm base for the jack on the ground. If necessary, use a board.

**Passengers should not remain in the car when the car is jacked up.**

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

5. To raise the car, turn the handle clockwise. To get the jack as vertical as possible, push the upper part of the jack toward the body while you are jacking up the car. **Only raise the car as much as is needed to change the wheel.**
6. Fully unscrew the wheel nuts and remove the wheel.
7. Place the spare wheel against the wheel hub, reinstall the nuts and handtighten them crosswise. Be sure the wheel nuts are inserted with the beveled edge toward the wheel. When tightened alternately, the nuts will center the wheel correctly.
8. To lower the car, turn the handle counterclockwise.

9. Then go crosswise from one nut to another, tightening them firmly with the wheel nut wrench.

10. Correct tightness of the wheel nuts is important. **Correctly tightened nuts should have a torque of 108 lb/ft (steel rims) or 94 lb/ft (aluminum rims).** This torque can be obtained with the wheel nut wrench by any person of average strength. If in doubt about the correct tightness of the wheel nuts, have it checked with a torque wrench by your dealer or at a service station.
11. Reinstall the plastic covers to the wheel nuts.
12. Adjust the air pressure of the tire you have just put on. For correct tire inflation pressures, see page 49. Have the defective wheel repaired.