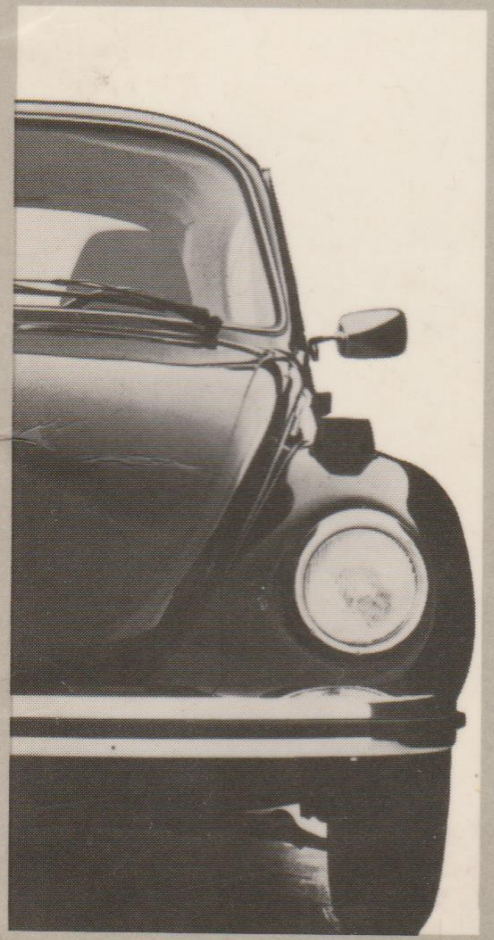
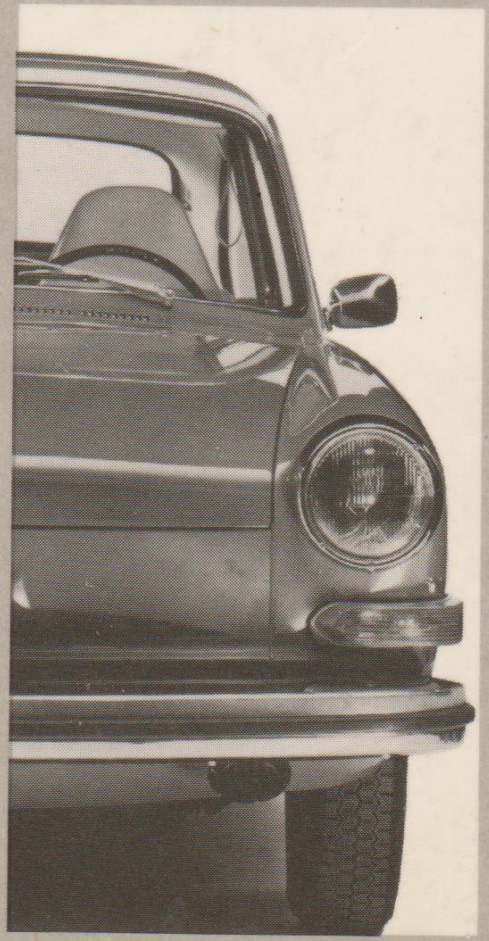
Instruction Manual

Driving - Car Care - Do-it-yourself





Instruction Manual, Part 2

Driving, Car Care, Do-it-yourself

Type 1, 2, 3 and 4

August 1972

VOLKSWAGENWERK AG · WOLFSBURG

Contents

The Volkswagen factory is working continuously on further developments to all VW types and models. We trust you will appreciate that we must reserve the right to alter, without notice, any of the equipment and specifications illustrated or described in this manual. Special equipment such as is often required due to local regulations is not taken into account.

VOLKSWAGENWERK AKTIENGESELLSCHAFT

Foreword

This part of the instruction manual deals with the practical aspects of running a Volkswagen.

"Driving, Car Care, Do-it-yourself" contains a lot of information which you will definitely require at some time or other.

This manual can make you a well informed Volkswagen driver, it cannot, however, and is not intended to make you a VW mechanic.

Present day safety regulations and environmental protection place very strict limits on the amount of repairs and adjustments which even a technically skilled and experienced handyman can undertake on the engine and running gear.

The Volkswagen factory also makes no exceptions in this respect.

Tinkering with the vital parts of a motor vehicle can endanger the life and health of all road users. Alteration of the factory settings of carburetor, ignition and valves invariably changes the emission values so that they no longer comply with official standards and such alterations are forbidden in most countries today. Please leave these operations to the specialists in our workshops who are waiting to help you all over the world.

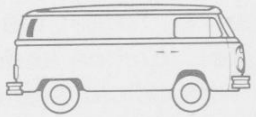
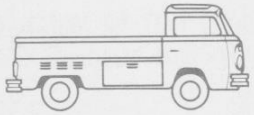
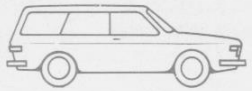
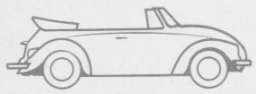
There are still ample opportunities for a keen DIY man to work off his surplus energy but these should – in our opinion – be confined mainly to the sector "Car Care".

The "Driving, Car Care, DIY" part of the manual is for all VW drivers who have Type 1, 2, 3 or 4 vehicles. Information which applies to a particular Type and is not common to all vehicles is listed in table form where possible so that it is easy to find. Apart from this, it is also possible to see at the same time what the item concerned "looks like" on the larger (or smaller) vehicles and this offers some interesting opportunities for comparison.

Volkswagenwerk Aktiengesellschaft

In this booklet we refer to the VW vehicles as the Type 1, 2, 3 and 4. Not all VW owners know immediately which model is meant, even though this short designation which was originally only used internally has become quite well known "outside".

If you do not know which model is which, see table below.

Type 1	Type 2	Type 3	Type 4
 1200	 Delivery van	 1600/L/LE	 411 E/LE
 1300	 Pick-up	 1600 T/TL/TLE	 Variant 411 E/LE
 1303/S	 Double Cab Pick-up	 Variant 1600/L/LE	
 1303 LS 4 seater Convertible	 Kombi Microbus Microbus L		

Driving

Driving safely

You will have read in part 1 of the instruction manual "Operation and Data" – or possibly you already knew – what a lot of passive and active safety has been built into your Volkswagen.

It is now up to you to make the most of this. Here are a few simple rules.

- drive carefully and defensively
- watch the traffic well ahead
- judge your speed and braking distances properly particularly when tire adhesion is reduced due to rain or snow and ice.
- keep your vehicle in good mechanical condition by having regular maintenance checks carried out by specialists
- make use of the "Volkswagen Diagnosis and Maintenance System". This system has been developed specially to cater for the higher safety requirements of modern road traffic.

For everyday use there are also a few safety measures which no responsible driver should forget:

Before getting behind the wheel

- check that the tires are in good condition and correctly inflated
- ensure that all windows are clean and unobstructed
- check that the headlights, tail lights and turn signals are clean
- check that all the lights are working. The headlights, turn signals and brake lights work only when the ignition is switched on.

Before moving off

- adjust the driving seat so that you are comfortable and can reach all the controls without effort
- set inside and outside mirrors properly
- put your safety belt on and ask all your passengers to do the same
- check that the dual circuit brake warning lamp is working (if fitted) by switching the ignition on
- check windshield wipers (ignition on) and windshield washer
- check that all doors and rear flaps (Variant and Type 2) are properly shut.

Before getting into traffic stream

- check the brakes – after having a good look in the mirror
- make sure that the handbrake is right off.

When on the move

- keep a safe distance behind preceding vehicle
- give signals in good time when turning or changing lanes
- don't drive at top speed when it is dark
- switch the low beams on in good time at dusk so that you can be seen by other road users. This also applies in the daytime when it is foggy or snowing
- use fog lights and rear fog lights (if fitted) according to regulations
- remember that you have emergency lights to use if your car breaks down on a busy road. Always try to get the vehicle off the road as quick as possible when this happens. Place warning triangle on the road.
- don't continue driving when you feel tired
- always allow for the carelessness of other road users.

When leaving the vehicle

- protect it against misuse and theft by removing ignition key and locking the steering. Close the windows and lock the doors.
- take steps to stop car rolling away especially when parking on gradients.

Tires and wheels

The tires are an important part of the vehicle design. The tires fitted in production are carefully matched to the vehicle type and contribute considerably to the good roadholding and handling properties. Information on the standard tire sizes, tire types and rim designations is given in the first part of the instruction manual.

Here are a few general notes on tires:

New tires

- New tires can be "run in". (See also the paragraph "Tires" in the section "Driving rules").

Tire pressures

- The tire pressures are given in the first part of the instruction manual and also on a sticker on the inside of the glove compartment lid or on the flap over the tank filler cap on the Type 2.
- The pressures are for cold tires. The pressures must not be reduced if tires are checked when hot and pressure is higher than specified.

Tire care

- Check tires for damage from time to time and remove any foreign bodies embedded in treads.
- Keep oil and gasoline off the tires.
  Try to avoid exposing tires to intense sunlight for long periods.
- Replace missing dust caps as soon as possible.

Tubeless tires

- All tires on Type 1, 2, 3 and 4 vehicles are tubeless.
- Tubeless tires may only be fitted to the standard hump type safety rims.
- The use of tubes in tubeless tires should be restricted to emergencies.

Replacing tires

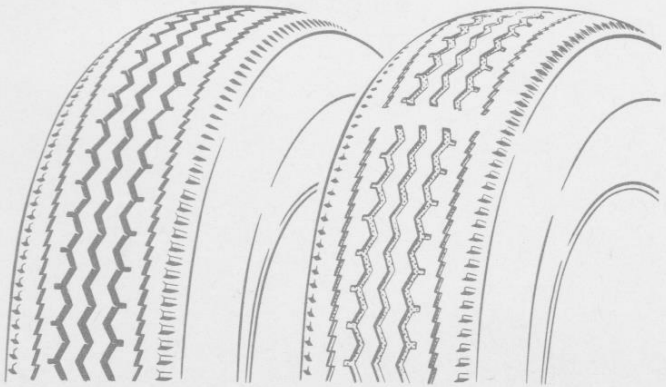
- For safety reasons it is advisable to renew tires on all four wheels at the same time or to renew them at least in pairs on the axles.
- Vehicles which are fitted in production with radial ply tires must be fitted with the same type of tire when replacements are made.
- Only tires of the same type and tread pattern may be combined.
- A combination of radial ply and normal tires (cross ply) is not permitted.

Tire wear

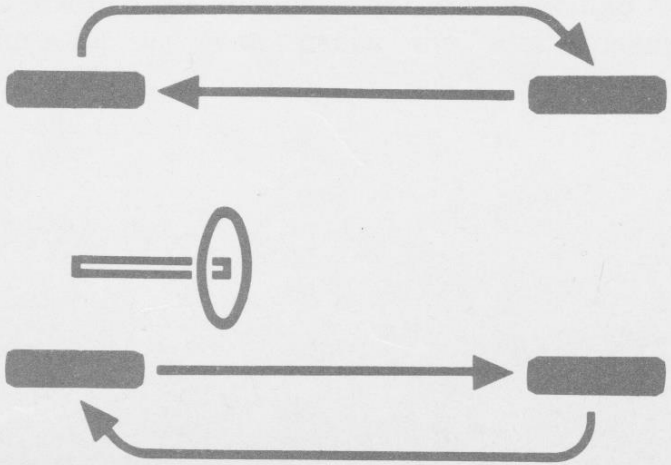
When the tread has worn down to a depth of 1 mm measured at any point on the tread, the tire has reached the limit for safe usage. We advise you however not to let the tires wear down to this extent as tires with treads in this condition cannot grip the road surface properly when driving at high speeds on wet roads.

Wear indicators. At the bottom of the tread grooves of the original tires on your vehicle there are a number of 12 mm wide and 1.6 mm high bars running across the tire. There may be from 4 to 6 bars according to make of tire.

When these bars appear in two or more adjacent grooves so that there is no longer any tread at these points the tires concerned should be replaced as soon as possible.



Uneven tire wear is not always due to some vehicle condition such as incorrect wheel alignment, etc. It is often the result of a particular style of driving, for example very fast cornering. If the tire pressures are neglected for a long time this can also cause abnormal wear. To avoid having to replace the tires earlier than necessary in such cases it is advisable to change the tires round as shown below – without altering the direction of rotation. Afterwards the inflation pressures must be corrected.



Balancing the wheels

- All wheels are balanced at the factory but as they tend to get out of balance after being in use for some time due to natural tire wear, the wheels should be balanced again every 10000 km.

- The wheels should always be balanced again when a tire has been repaired and also when a tire has lost pressure due to a faulty valve.

Driving economically

Anyone who wishes to drive as economically as possible, which means keeping fuel consumption and tire and brake lining wear to a minimum, should avoid high speeds and full throttle acceleration and always drive in a smooth controlled manner.

In other words, economical vehicle operation depends to a large extent on your personal style of driving.

In addition, however, it is essential to bear in mind that the individual conditions in which the vehicle is operating also affect the fuel comsumption and these factors cannot be influenced to any extent by the driver. Factors which are unfavourable to fuel consumption are for example:

- The density of traffic, particularly city traffic with numerous traffic lights.
- Stop-start operation which involves driving short distances with frequent stops so that engine is continually cooling down and warming up.
- Condition of road surface, particularly loose sand and snow.
- Driving in long columns of vehicles in low gear with a relatively high engine speed (in relation to distance covered).

A low fuel consumption is obtained when driving for long distances with hardly any stops at a medium speed. At a reasonable speed on a motorway it is possible to obtain consumption figures which are below the specifications.

Every engine has a favourable consumption figure in the medium speed range. In technical terms this is the range in which the engine developes its best pulling power, also known as torque. The speed ranges in which the consumption is at its lowest are given in Part 1 of this manual.

Fuel consumption

The consumption determined in accordance with DIN 70030 and quoted in the technical data section is often considered – due to lack of knowledge of the subject – to be the normal or average consumption. This frequently causes dissatisfaction when assessing the fuel consumption under normal everyday conditions. For this reason we should like to clarify the situation as follows.

The term "specified fuel consumption" was created in order to be able to compare the fuel consumptions of the various vehicles on the market. This is only possible if the consumption is always checked in identical conditions.

These conditions are laid down in DIN 70030. The fuel consumption must be checked in accordance with the following rules:

1. Vehicle: The vehicle must be a standard production model in every respect, the engine must be run in and the carburetor and ignition must be set as laid down by the factory. The load must be half the permissible load and the tire pressures must be as specified.

2. Test route: A marked 10 km stretch, road surface level and dry, minimum gradients (maximum 1.5%). There should be no wind (maximum air speed 3 m/s). The air temperature must be between 10° C and 30° C and the atmospheric pressure should correspond approximately with the norm for the low land areas. The stretch must be traversed in both directions without stopping, at as nearly as possible ¾ of maximum speed but not more than 110 km/h.

According to DIN 70030, 10% is then added to the determined consumption.

The fuel consumption is, therefore, determined under relatively favourable conditions such as will rarely be encountered in actual practice. However, as already mentioned in the section "Driving economically" the specified fuel consumption can be obtained or even cut down by careful driving on a motorway.

In general, the average consumption in practice is higher than the specified consumption. In the cold seasons in town traffic the conditions are particularly adverse. In such cases the fuel consumption can quite easily be several liters above the specified figure.

Driving rules "which are well worth reading"

Engine

- Never race the engine when it is cold – neither in neutral nor in the gears.
- Driving with engine speed too low is just as bad as tearing away regardlessly.
- Do not depress the accelerator pedal on hills and let engine labour, change down in good time.

Clutch

- Slip clutch as little as possible when moving off and changing gear.
- Always declutch fully when changing gear.
- Change down when driving in columns or turning corners instead of slipping clutch.
- Never use clutch pedal as a footrest when driving.

Transmission

- Take your hand off the gear lever after changing gear: The pressure of the hand is transmitted to the selector forks in the transmission and can cause the forks to wear prematurely.
- Engage reverse gear only when vehicle is standing still.

Brakes

- **The braking distance increases very rapidly as the speed increases. At 100 km/h, for example, it is four times longer than at 50 km/h.**
- Just after moving off, before speed has increased too much, have a good look in the mirror and then depress the brake pedal to see if the brakes are working properly.
- Apply brakes in good time whenever possible but do not use too much pressure because locked wheels increase the braking distance.
- After driving through water, driving in heavy rain or washing the car, the braking force – particularly with disc brakes – can be retarded slightly: The pads must be dried first by applying the brakes.
- Use engine braking when going down steep hills: Change down before starting to go down the hill and use brakes as a reserve. When brakes are applied, do not keep them on continuously, apply and release alternately.
- Brake linings can also be "run-in": The wear rate and frictional properties depend to a large extent on how the brakes are used when new. During the first 200 kilometers try to avoid emergency stops and do not carry out prolonged braking tests.
- Brake fluid is hygroscopic. Too high a water content in the brake fluid becomes detrimental to the entire brake system after a period of time so the brake fluid must be renewed every two years. Afterwards the system must be bled.

Tires

- New tires do not give maximum adhesion at first and should therefore be "run-in" at medium speeds for about 100 km. This has a beneficial influence on the service life of the tire.

- When wheels are locked by hard braking, the tread surface wears unevenly and this can affect the balance of the wheels.

Driving in winter

Volkswagens are well known for their good winter performance. If you wish to make full use of the winter driving characteristics offered by the vehicle design, note the following points.

Winter tires

- M + S and M + S studded tires only have advantages when road conditions are really wintry. Vehicles fitted with radial ply tires can often manage without winter tires if conditions are not too severe.
- Optimal winter performance is offered by radial ply M + S tires with studs – this applies to all Volkswagens.
- Vehicles which are fitted in production with radial ply tires – that is all Type 4 and certain Type 2 models – should be equipped with radial ply types when changing over to M + S or M + S studded tires.
- When fitting normal winter tires (cross ply), note the PR figures on the tire walls. The specified carcass strength (PR number) must be adhered to.
- Winter tires must always be fitted on all four wheels.
- Winter tires should be inflated to 0.2 bar (3 psi) above the pressures for normal tires.
- M + S tires with studs should be run at moderate speeds for about 300 kilometers in order to give the studs time to settle.

Snow chains

- Normally, snow chains need only be fitted on the driving wheels. If, in exceptional cases, it is necessary to fit chains on the front wheels as well, the steering should not be locked hard over as otherwise the chains may rub in the wheel housings. This applies particularly when chains are used together with winter tires.
- Only thin chains which do not stand clear of the tread more than 15 mm, including tensioner, should be used.
- When driving over long stretches of road which are free of snow, the chains should be removed. On dry roads the chains wear very quickly and can damage the tires as well.

Engine oil

- Change to a thinner oil in good time (for viscosity classes see section on lubricants).
- If you only drive short distances and in city traffic the oil should be changed every 2500 km. If you only drive a few hundred miles a month under these conditions the oil should be changed every 6 to 8 weeks. During the other seasons these measures are unnecessary and uneconomical.

  In areas with arctic climates and temperatures below about −25° C the engine oil should be changed every 1250 km.

Transmission oil

- The SAE 90 transmission oil can generally be used all the year round.
- Only in areas with predominantly winter temperatures is it necessary to use the thinner SAE 80 transmission oil.
- In areas with arctic temperatures lower than –25° C, ATF (Automatic transmission fluid) can be used in the manual transmission. When the temperature rises it is essential to have the ATF replaced by SAE 80 or 90 oil.

Battery

- A really cold battery has only a fraction of its normal capacity, particularly if it is not fully charged to start with. In order to ensure that the engine starts readily in all conditions:
- Have battery checked at the workshop frequently and charged if necessary. (Instructions on quick charging are given under "Battery care").

Spark plugs

- The electrode gap should not be too large in the winter. The correct gap is 0.7 mm.

Handbrake

- If brake linings are wet they can freeze to the drums, so:

  Do not leave handbrake on when parking if temperatures are below freezing point. Engage 1st or reverse gear instead. When parking on gradients, turn wheels towards kerb as well.

Windshield washer

- We recommend the use of our "Window Cleaner" as an anti-freeze agent for the washer container (see "Maintaining value by proper care"). One can also use methylated spirits: 1 part meths to 3 parts water will stop the water freezing down to about –12° C.

Door locks

- Door locks can freeze up in winter if water gets into the lock so do not aim the water jet directly at the lock when washing the car. Or better still: Cover the keyhole beforehand.
- A frozen lock can be thawed out with our "Lock Defreezer" even at very low temperatures. This solution contains a preservative agent so that is does not damage the lock cylinder even when used often. It does not damage the paintwork either.

  Door lock defreezer (100 cm^3 plastic bottle) 000 096 106.

Iced up windows

can be sprayed with our defroster spray. After the fluid has worked for a short period, the ice can be wiped off.

Defroster spray (300 cm^3) 000 096 109

Ice on the inside of the windows can be prevented by rubbing the glass with a defroster cloth when there is a danger of frost.

Defroster cloth 000 096 110

The engine cooling air slots must always be free so that the supply of air for the engine, cooling fan and heating is not restricted.

It is a good idea to carry a shovel or short-handled spade in the car in the winter, in case you get stuck, a small hand brush to sweep snow off and a plastic scraper for the windshield, headlamps and mirror.

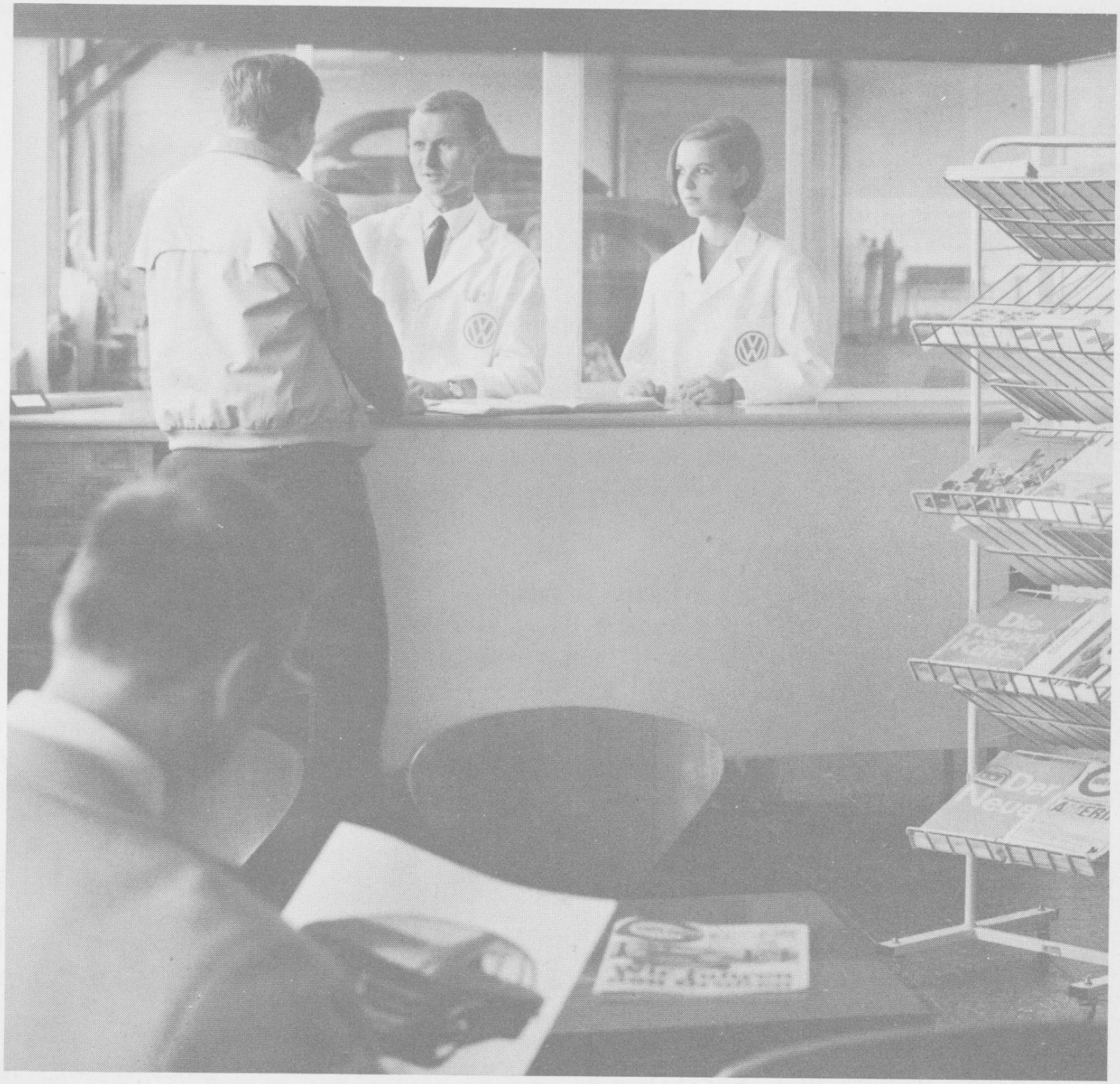
There are two good things about VW all over the world. The Volkswagen. And the Volkswagen Service.

You will find VW specialists everywhere.

Not just within a radius of a few thousand miles but in 140 different countries. In more than 9000 authorised VW agencies.

You can rest assured that you will find VW Service everywhere – as reasonably priced and reliable as at home. We know, because we supply all VW agents with everything they require. From the smallest replacement part to the largest special tool.

We don't just wish you pleasant motoring – we do something to keep it that way.



Towing trailers

Towing a trailer places a considerable strain on the body, transmission, clutch and brakes of your Volkswagen. To prevent damage and in the interests of road safety, please note the following points:

- The maximum trailer weights must not be exceeded. The permissible weights are given in Part 1 of this manual

- For Volkswagens with manual transmissions the factory issues a special permit to tow a heavier trailer in the case of mobile shops. caravans, or sports trailers with brakes.

- The towing bracket must be installed in accordance with the instructions from the VW factory or the fitting instructions from the manufacturer. Check whether local regulations require the fitting of a towing bracket to be recorded in the vehicle documents.

- The weight of the trailer drawbar on the ball of the towing bracket must be within certain minimum and maximum limits. The permissible rear axle load must no be exceeded due to the nose weight of the trailer. See further details in part 1.

- If a fully loaded trailer is to be towed continuously it is advisable to use heavy duty rear axle springing and shock absorbers. This detracts from the ride comfort and handling when the vehicle is used on its own.

- A second outside mirror is essential in most cases. If the trailer is wider than the vehicle, both outside mirrors should be on extending telescopic arms so that a good view to the rear is always obtained.

- The tires on vehicle and trailer should always have good treads. When the towing vehicle is fitted with studded tires, the trailer should also have studded tires.
  In accordance with the heavier loads, the tires should be inflated to the highest permissible pressures.

- The hill climbing figures given in part 1 of the manual are for the vehicle without trailer. According to the weight of the trailer these figures will be entirely different when pulling a trailer.

- Towing a trailer will naturally mean a higher fuel consumption. The increased weight and the considerably higher rolling and air resistance of the car and trailer require more power from the engine and more power means more fuel.

- When moving off, do not rev. engine more than necessary and do not slip clutch too long.

- Change down in good time when going up or down hills.

- Use brakes in good time and as gently as possible. To prevent the trailer wheels from locking when trailer has over-run brakes, apply brakes gently at first and then brake rapidly.

- Always drive at a moderate speed. In many countries there are restrictions on speeds when towing trailers.

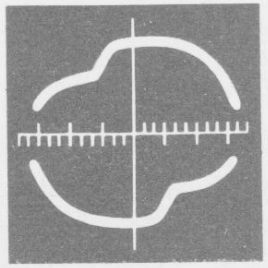
- Type 2 vehicles with automatic transmissions must not be used to tow trailers.

Car care and maintenance

Car care can be done by every car owner. All that is required is interest and pride in one's own car, a supply of the approved VW car care materials and a quick glance at our instructions which must be followed exactly.

Maintenance is more than car care. It requires specialist knowledge, workshop appliances and special tools. Even oil changing and lubricating require specialist knowledge and cannot be done properly without the equipment available in a lubricating plant. This work must be done in accordance with the instructions from the factory because it influences reliability and service life and can, in certain circumstances, affect the warranty.

If you have your vehicle checked and serviced under the **Volkswagen Diagnosis and Maintenance System,** you can rest assured that everything will be looked after properly and you have nothing further to worry about. The **VW Computer Diagnosis** makes it possible to find defects and determine the condition of the vehicle reliably and very quickly. The **Volkswagen Service Record,** issued with every vehicle contains detailed information on exactly what has to be checked and maintained, when this has to be done and what advantages are offered.



Maintaining value by proper care

Regular and careful care helps to maintain the value of the vehicle. Every VW workshop carries stocks of Volkswagen car care materials. The part numbers are given below.

Washing

Wash vehicle frequently with clear water, but do not do so in direct sunshine.

Rinse sponge often to avoid scratching the paintwork.

If water alone is not adequate, add a shampoo to the water and apply with a sponge or soft brush.

Then rinse vehicle well and dry with a leather.

Tin of shampoo (300 cm^3) 000096112

Sponge 000096151

Leather 000096155

Car cloth 000096150

Brush 000096157

Washing gloves 000096153

Nylon washing gloves 000096160

Waxing

Wax as often as possible. This will prevent dirt from sticking to the paint and industrial grime from penetrating into the paint.

Wax paint after washing and rub until paint shines again or just put wash/wax solution in second lot of water regularly. Wash with this solution and dry with leather.

Tin of wax (250 cm^3) 000096011

Tin of wax (1000 cm^3) 000096012

Tin of wash / wax solution (300 cm^3) 000096122

Polishing

Should only be done if paint has lost its shine and gloss cannot be brought back with wax.

After treatment with polish the vehicle must be waxed.

If paint is cleaned with polishing wax it need not be waxed afterwards.

Tin of paint polish (250 cm^3) 00096001

Tin of paint polish (1000 cm^3) 000096002

Tube of polishing wax (210 grams) 000096021

Bag of polishing cotton (200 grams) 000096161

Bag of polishing cotton (500 grams) 000096162

Patching up paint damage

Small marks in the paint such as scratches or stone damage can be repaired with genuine VW touch-up brushes or spray cans before the marks rust. A sticker near the jack or behind drivers seat on Type 2, gives the color designation and number of the original finish.

LEUCHTORANGE L20B.
PASTELLWEIB L90D

Removing industrial grime

Treat paint surfaces with industrial grime remover as soon as possible.

The solution must be rinsed off very thoroughly!

Pay particular attention to seams and joints.

Bottle of industrial grime remover
(500 cm³) 000096091

Removing tar spots

Treat paint surfaces with tar remover as soon as possible. After treatment, rinse traces of remover off with soap powder solution (water and shampoo).

Tin of tar remover 000096052
(300 cm³)

Removing insects

Dried on insects can be cleaned off paint with insect remover.
Wash surfaces afterwards.

Clean dirty windshields with insect sponge.

Tube of insect remover 000096081
(80 grams)

Insect sponge 000096083

Parking under trees

Vehicles which are parked under certain trees in summer are often found to be covered with sticky spots. These spots can be taken off easily with a shampoo if the treatment is not delayed too long.
It is advisable to wax the paint afterwards.

Care of chromed parts

Before applying chrome cleaner, the parts must be washed and dried. Then clean with chrome polish from tube.

To clean and protect the parts from the weather they can be treated with chrome protector from the tube. This compound contains a preservative.

Liquid chrome protector should be used to prevent corrosion of parts for a long period. Protective film remover is used to remove the film.

Tube of chrome polish 000096061
(80 grams)

Tube of chrome protector . . . . 000 096 067 (80 grams)

Tin of chrome protective film . . 000 096 063 (500 cm^3)

Tin of chrome protective film . . 000 096 167 remover (500 cm^3)

We advise the use of spray gun 000 096 064 to apply the chrome protective film and the remover.

Cleaning cloth uphostery

Clean with vacuum cleaner or a medium hard brush.

Spots or marks can be removed with liquid plastic and cloth cleaner: apply by moistening a clean, plain cloth with cleaner and rubbing spot with a circular movement and working inwards.

Plastic and cloth liquid cleaner . 000 096 072 (500 cm^3)

Cleaning leatherette

If not very dirty, clean with soft cloth or brush.

If very dirty, clean air-permeable leatherette with plastic cleaner. Apply with absorbent plain cloth. After cleaning, rub area dry with a soft cloth.

Non-permeable plastic material can be cleaned with plastic cleaning paste.

Plastic cleaning paste . . . . . 000 096 071 (200 grams)

Liquid plastic cleaner (500 cm^3) . 000 096 073

Cleaning windows

Windows can normally be cleaned with a sponge and warm water and dried with a leather. Do not use this leather for the paintwork because traces of paint cleaner and polish will cause streaks to appear on the windshield.

Insects can be removed with the insect sponge and rubber or oil deposits with glass cleaner.

Remove silicon, grease and oil with "A'Silic":

Sprinkle powder on moistened windows, spread it evenly with a sponge, rinse off and rub window dry.

Silicon remover added to the water in the washer system also helps to keep the screen clean.

"A'Silic" powder . . . . . 000 096 075 (30 cm^3)

Silicon remover . . . . . 000 096 093 (120 cm^3 bottle)

Bottle of window cleaner . . . . . 000 096 102 (125 cm^3)

Bottle of window cleaner . . . . . 000 096 104 (250 cm^3)

Insect sponge 000 096 083

Anti-mist cloth 000 096 165

Squeegee 000 096 152

Care of convertible top

The convertible top does not require any special care. It is important however, to clean the plastic material regularly. It is usually sufficient to just wash the top with clear water and a soft brush. Do not use "strong" washing solutions on the top. Wash-wax compounds are only to be used on the paintwork. The Convertible should only be washed in automatic car washing plants if solutions containing alkalies are **not** used. Spots and marks can be removed best with our plastic cleaner. Paint thinner, chlorine based spot removers or similar solutions are unsuitable for this purpose as they damage the plastic material.

The hinges of the top linkage should be cleaned occasionally and a few drops of oil applied. Afterwards it is advisable to wipe the joints dry so that oil does not drip on to the top material.

Noises caused by friction between the window frames of the convertible and the rubber weatherstrips can be eliminated by rubbing in some talcum powder or glycerine.

Windshield wiper blades

Blades which are clogged with oil and insects should be removed and cleaned with a hard brush and a detergent solution. The blades should be replaced once or twice a year according to condition.

Door and window weatherstrips

To keep weatherstrips flexible and intact and prevent them from freezing on in the winter, rub them occasionally with talcum powder or glycerine.

Airing the body

If the vehicle is left in a closed garage for long periods, the garage and car interior should be aired from time to time to prevent the formation of mould and damp stains inside the vehicle.

In a VW angency you get Genuine Volkswagen Spare Parts, Genuine Volkswagen Exchange Parts,* Genuine Volkswagen Accessories. All with a guarantee.

Genuine Volkswagen spare parts are the proper parts for your VW.

Genuine Volkswagen exchange parts too. What is the difference? The price.

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VW values quality. Do you?

* Due to circumstances beyond our control, Genuine Exchange Parts are not available in some countries.

Oil changing and lubrication

The following brief description of the oil changing and lubrication operations is intended to give the interested reader an idea of what is done in the workshop.

With the aid of this manual it is possible to have this work done in some other workshop if the next VW workshop is too far away and the work concerned cannot be postponed.

Lubricants

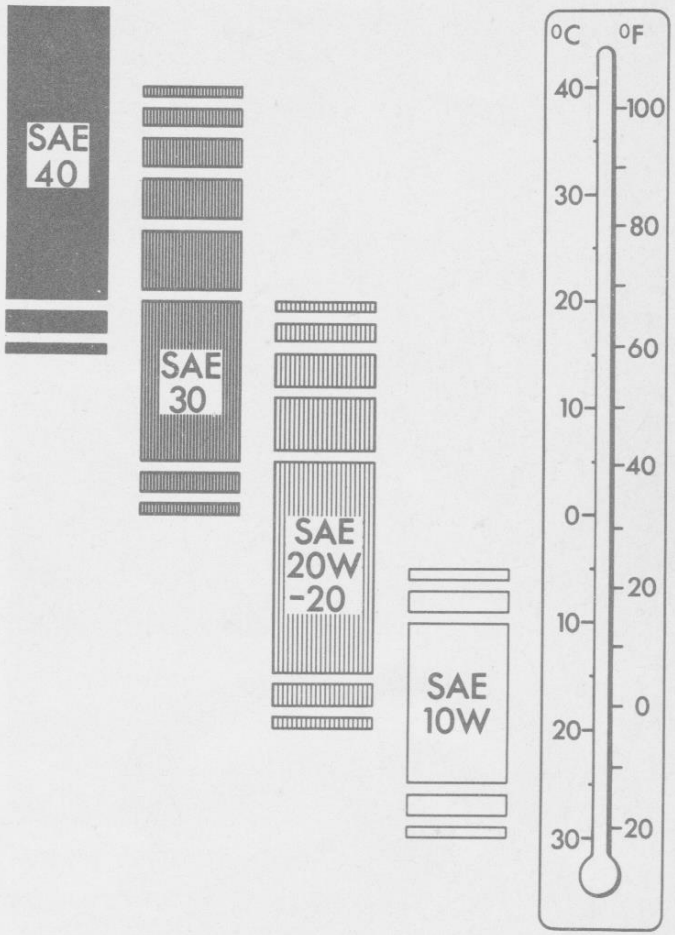
Engine oil

The correct sort of oil is a **good brand of gasoline engine HD oil,** or oils designed "SD" according to the new API system. Viscosity grade depends on the ambient temperature. As shown in the following table only two viscosity grades are required normally. The table is valid for VW engines in Types 1, 2, 3 and 4.

Tropical areas	in hot season		SAE 40
	in cool season		SAE 30
Areas with a temperate climate	in summer		
	in winter	where temperature is not normally below –15° C (5° F)	SAE 20 W–20
		where temperature is normally down to –25° C (–13° F)	SAE 10 W*

When the temperature is continually below –25° C (arctic areas) it is advisable to use SAE 5 W*.

* Do not drive at high speeds for long periods when using SAE 10 W oil if the outside temperature is above –10° C (14° F) or if using SAE 5 W when the temperature is above –20° C (–4° F).



Transmission oil and ATF (Automatic Transmission Fluid)

Transmission and final drive are combined in one housing and both lubricated with the same hypoid oil to Mil-L 2105 B specifications (additive basis: sulphur-phosphor).

SAE 90	All the year generally.
SAE 80	In areas with low average temperatures.
ATF	In areas with arctic temperatures (below –25° C / –13° F)

All AT fluids which carry the Dexron test mark, for example, Dexron® No. B 10100, can be used for VW vehicles. Suitable products are supplied by all well-known mineral oil firms.

Lubricant additives

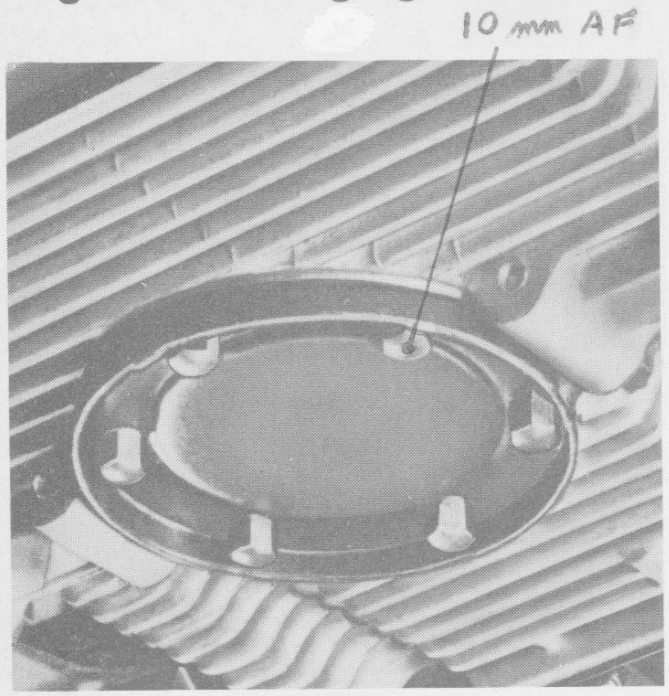
No additives of any kind should be mixed with the fuel or the lubricating oils.

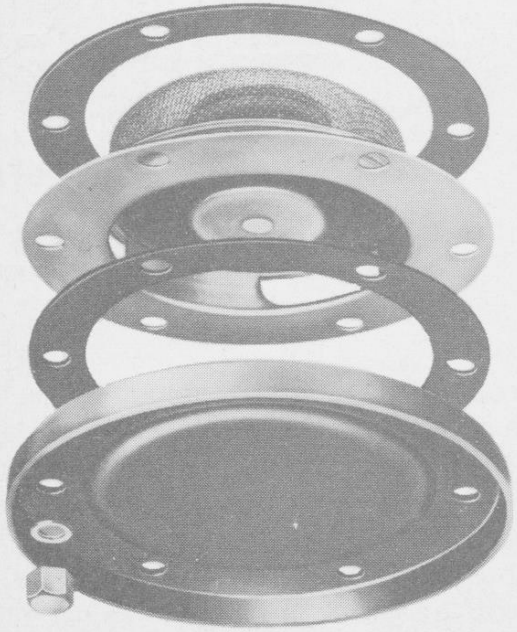
Grease

Use only multi-purpose grease with a lithium base.
The battery terminals and posts are coated with terminal grease.

As the operating ranges of neighbouring SAE grades overlap, as shown by shaded parts of table, **brief** variations in temperature can be disregarded. For the same reason it is also quite in order to mix oils of different viscosities when oil has to be added and the viscosity of the oil in the engine is no longer correct for the actual temperature.

Engine oil changing





Figs. 1 and 2

The engine oil is changed at 1000 and 5000 kilometers and then every 5000 kilometers. For other oil change intervals see section on "Driving in winter".

- The old oil should only be drained when warm.
- Clean oil strainer at every oil change.

Type 1	Type 2 – 1.6 liter engine (1.7 liter engine as for Type 4)	Type 3

– Figs. 1 and 2 –

Loosen all six cap nuts but only remove five. Detach strainer plate on one side with a screwdriver and let oil drain out. Remove strainer and clean thoroughly. Use new gaskets and washers when installing.

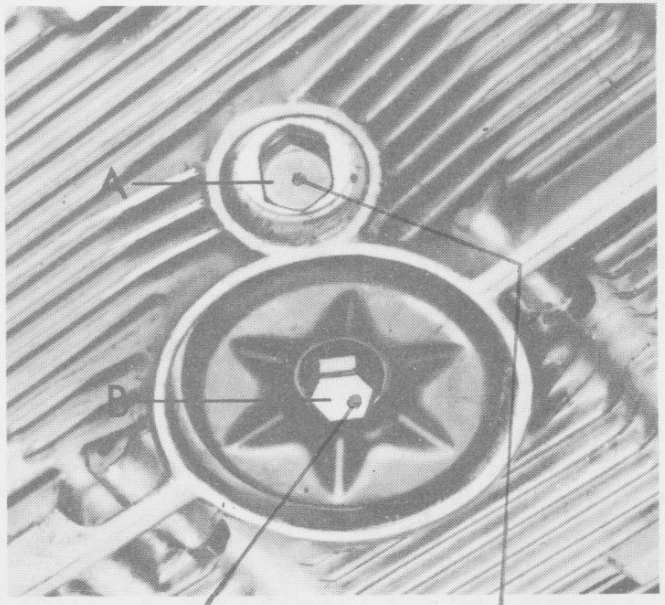


Fig. 3 13 mm AF OR 17 mm AF 19 mm AF

Type 4 (applies also to Type 2 with 1.7 liter engine)

– Figs. 3 and 4 –

Remove oil drain plug "A" 19 mm AF
Remove central nut "B" and take out strainer. 13 mm AF OR 17 mm AF
Clean strainer
Use new gaskets and washers
Tighten nut "B" to 10–13 Nm (7–9 lb. ft.) with a torque wrench.

The oil filter element is changed at 1000 and 10000 km and then every 10000 km, that is at every second oil change.

Oil sealing surface on new filter element. A special wrench is required to tighten the filter.

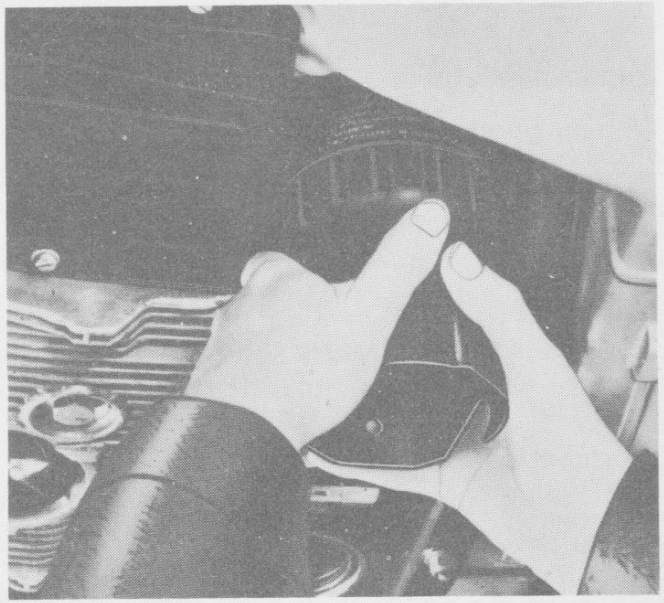
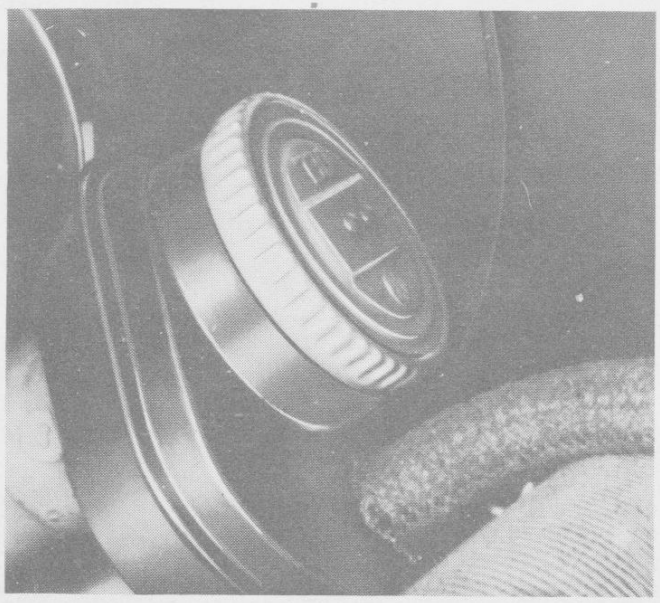


Fig. 4

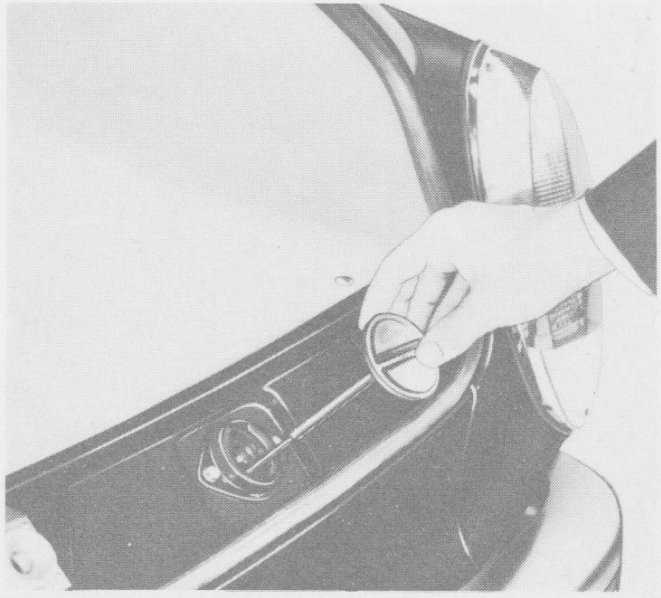
	Type 1	Type 2		Type 3	Type 4
Oil change quanti-ties (liters)	2.5	1.6 liter engine	1.7 liter engine	2.5	with filter change 3.5 without filter change 3.0
		2.5	with filter change 3.5 without filter change 3.0		

See "Lubricants" page for engine oil specifications. Always check level with dipstick after changing oil: The oil must be near the maximum mark but not above it on any account. See remarks on checking oil level in part 1 of instruction manual.

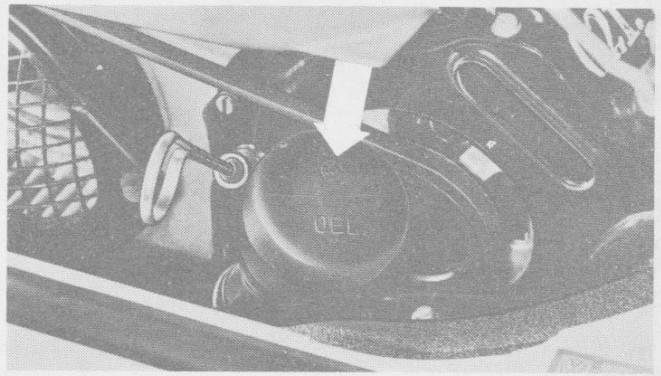
The illustrations show the engine oil filler openings: On the Type 4 Variant the dipstick and filler holes are separate in the rear cross panel. The dipstick is on the left and the oil filler on the right. On the Type 3 the dipstick is connected to the filler cap.



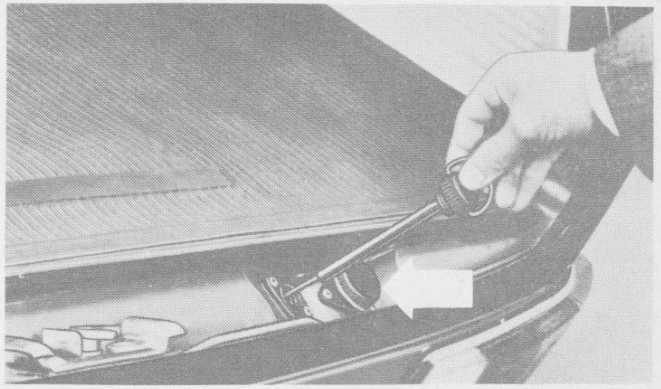
Type 1 and Type 2



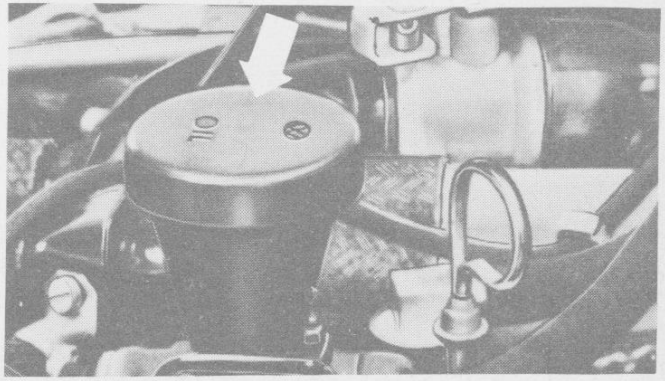
Type 3



Type 2 with 1.7 liter-engine



Type 4 Variant



Type 4 Sedan

Transmission oil changing

The gear train and final drive are in one housing and are lubricated with the same oil. See "Lubricants" page for oil specifications.

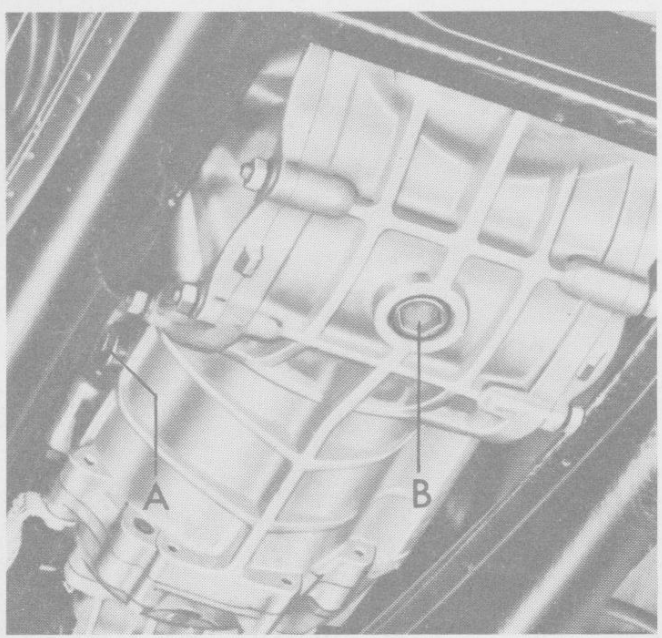
The transmission oil is normally only changed once – at 1000 kilometers.

The oil should be up to the edge of the filler hole "A".

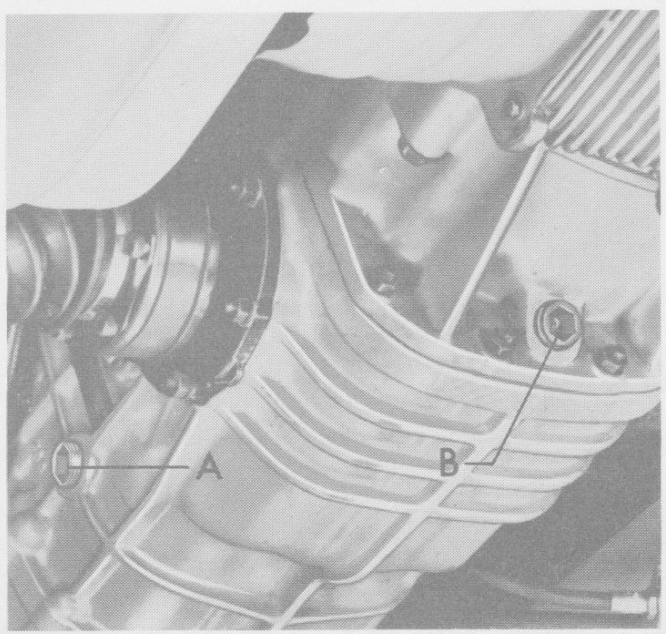
If the transmission oil has to be changed due to unusual operating conditions (see remarks on "Driving in winter"), note the following:

- Drain old oil only when it is warm. Remove oil drain plug "B".
- Clean the magnetic oil drain plug carefully.
- Put the correct amount of oil in slowly.

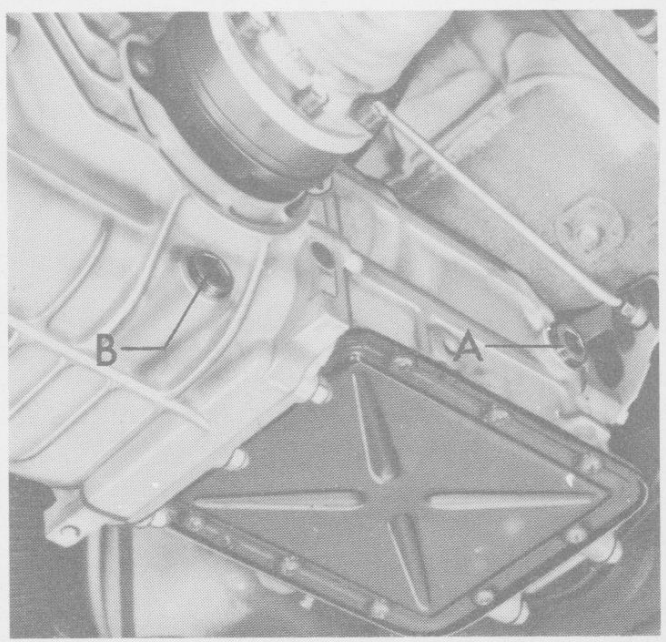
Oil change quantity (liters)			
Type 1	Type 2	Type 3	Type 4
2.5	3.5	2.5	2.0



Type 1 and Type 3



Type 2



Type 4

Lubricating front axle

Only Type 1 (1200/1300), Type 2 and Type 3

The front axles of the 1303 and the Type 4 do not require lubricating.

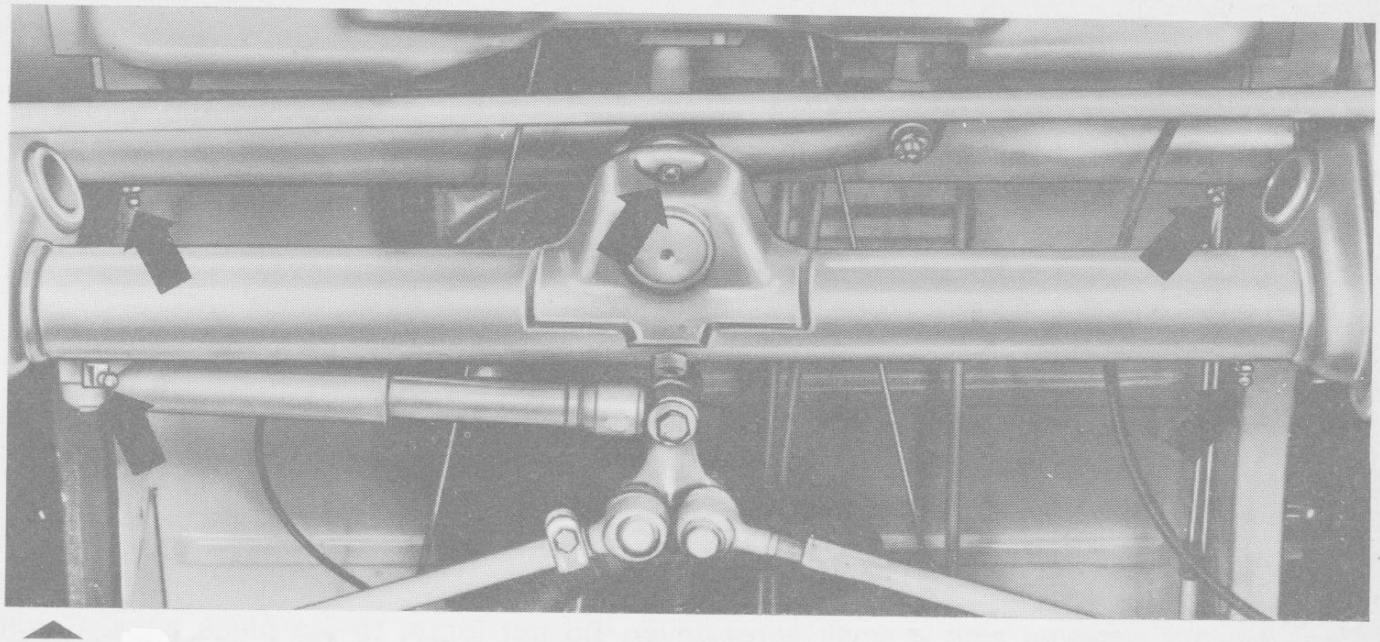
Lubrication intervals

Type 1: every 10000 km
Type 2: every 30000 km
Type 3: every 10000 km

or at least once a year at lower mileage

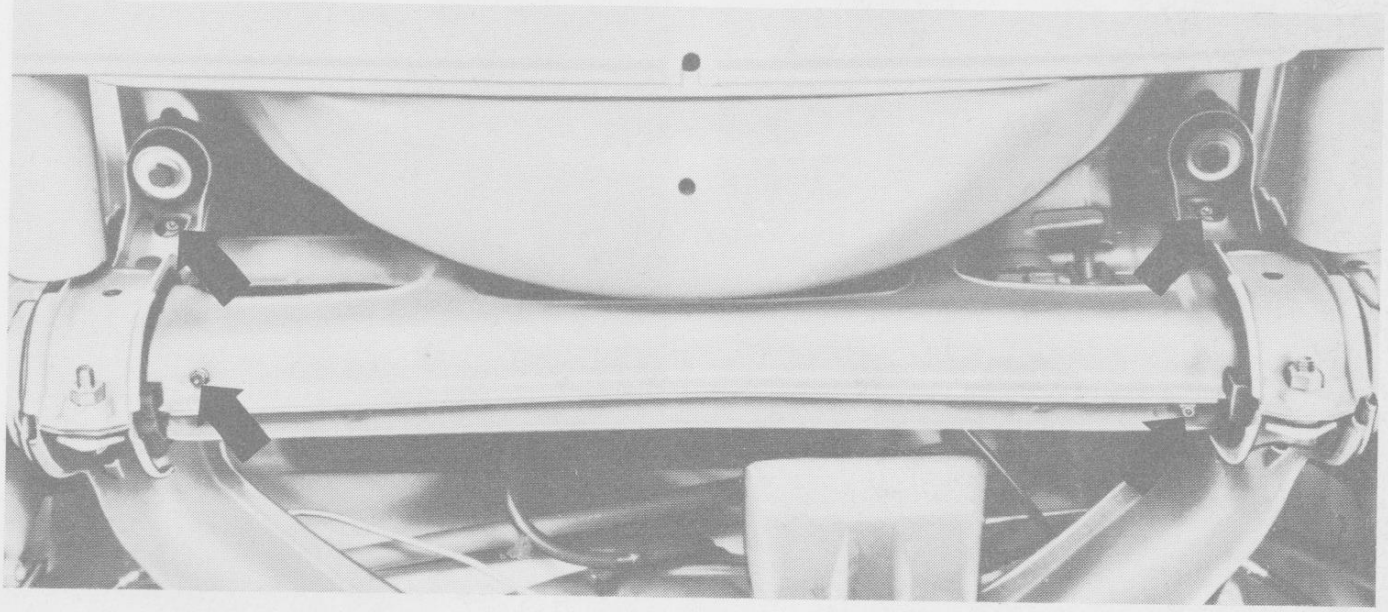
The illustrations show the location of the grease nipples on the Type 2 and 3. The Type 1200/1300 has a grease nipple on the underside of each axle tube at the same location.

- The front axle can only be lubricated properly when axle is free of load, that is with the front end lifted.
- Clean grease nipples and grease gun nozzle carefully.
- Inject grease until fresh grease starts to come out at the torsion arm sealing rings.
- Clean all traces of grease off the tires and brake hoses immediately.



Type 2

Type 3



Lubricating hinges

	Type 1	Type 2	Type 3	Type 4
Door hinges	Remove plugs use grease gun (Fig. 1)	Remove plugs, fill chamber with oil same as Type 3 and 4 (Figs. 3 and 4)	Fig. 3	Fig. 4
Check straps	oil	oil	oil	oil roller bearings
Link on sliding door hinge bracket	–	oil (Fig. 2)	–	–
Rear flap hinges	–	oil	–	–
Lubricants	Multi-purpose grease/ SAE 30 Engine oil	SAE 30 Engine oil		
Interval	every 10000 km or every 3 months			all 5000 km or every 3 months

Plugs can be removed with a small screwdriver. Do not forget to put plugs back. Catch surplus oil or grease and wipe hinges carefully.

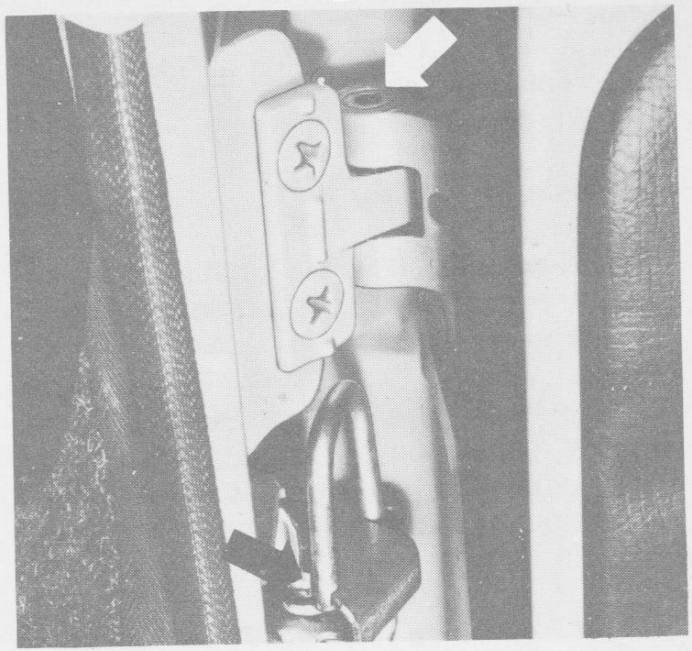


Fig. 4

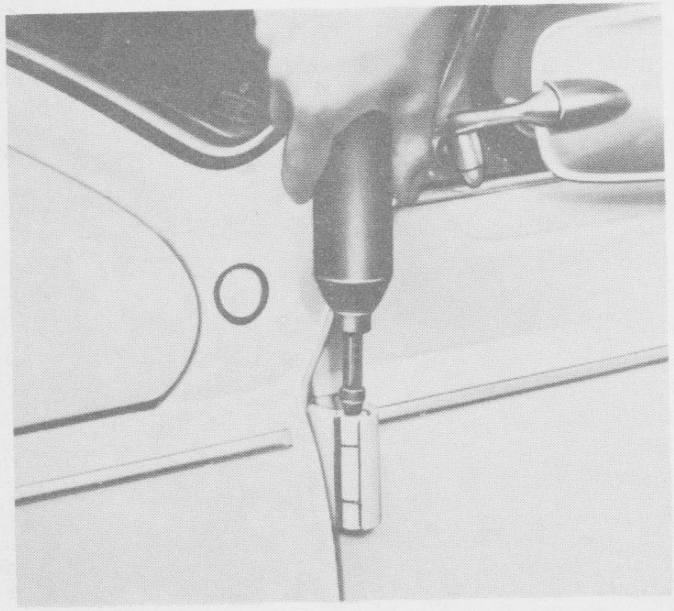


Fig. 1

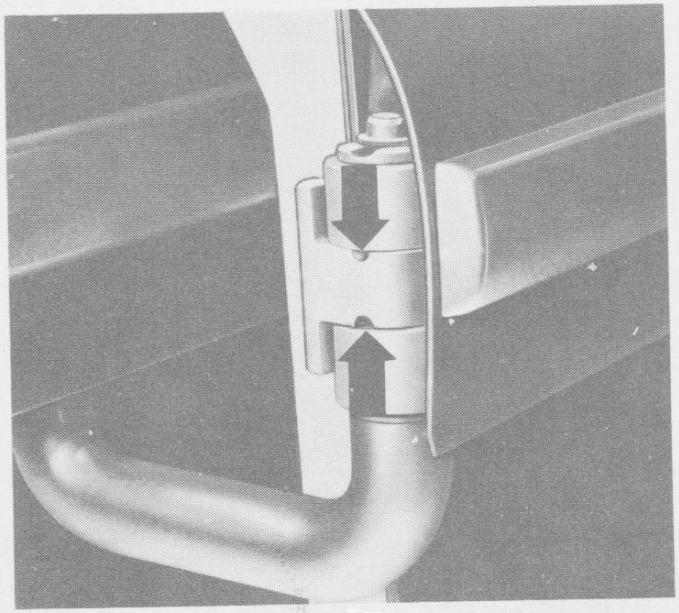


Fig. 2

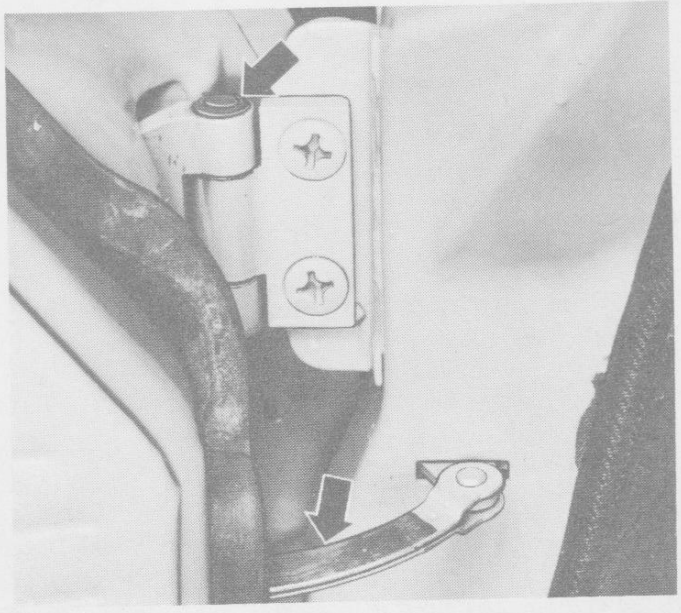


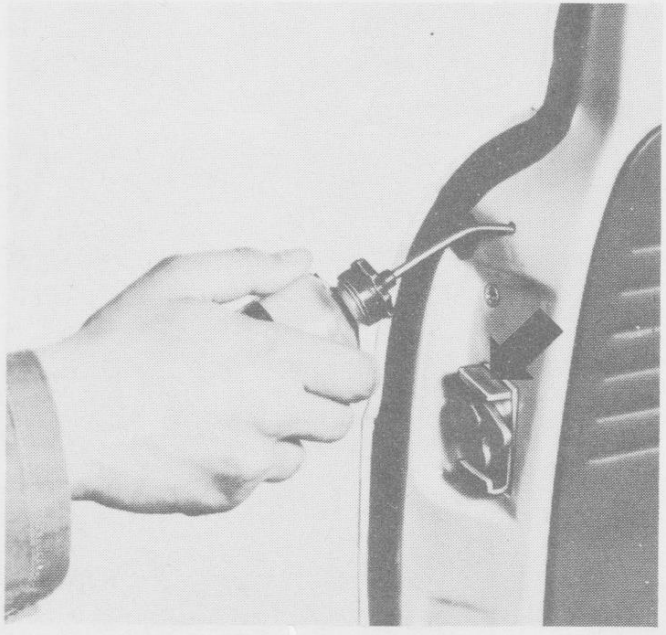
Fig. 3

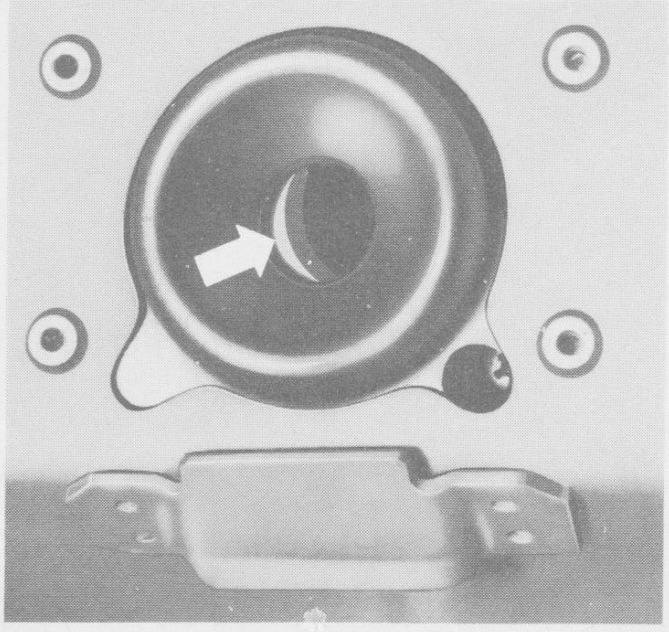
Lubricating locks

The door and hood locks should be lubricated when they become stiff to operate. The lock cylinders are lubricated with graphite powder by dipping key in the graphite and turning it to and fro in the lock a few times.

The door lock is lubricated by putting a few drops of engine oil through a hole in the end of the door which is normally sealed with a small plug. The friction surfaces of the latches and striker plates should be greased lightly.

The hood locks are also greased lightly.





They go to "school" with VW. So that you feel as safe with your VW all over the world as you do at home.

Every year 50000 specialists are trained in VW service schools. Mechanics, foremen, service advisers from every corner of the world. In small groups of 8–10 they get to know the most modern procedures.

Their knowledge is extended and kept up to date by continuous training at their place of work.

Result of this training: precision in servicing – and less time spent on the work.

For it is not sufficient for a VW workshop simply to produce quality. It also does so at reasonable prices.

Do-it-yourself

Everywhere where you see the familiar VW sign at the roadside you can be sure of expert advice and quick efficient assistance.

When your vehicle needs attention, take it to a VW workshop. It is in good hands there.

Just in case you have to deal with a small defect or breakdown yourself one of these days, we have included some information on the next few pages which should help you.

Changing wheels

Jack, spare wheel and tools can be found:

	Type 1	Type 2	Type 3	Type 4
Jack	under rear seat*	under front passenger seat*	in front luggage compartment	under rear seat*
Spare wheel	in front luggage compartment	in load compartment**	in front luggage compartment	in front luggage compartment
Tools	in front luggage compartment	under front passenger seat*	in front luggage compartment	in front luggage compartment

* See also "Removing and installing seats"
** On vehicles with full-width partition the spare wheel is under the front passenger seat.

Preparation

The following are required out of the tool roll:

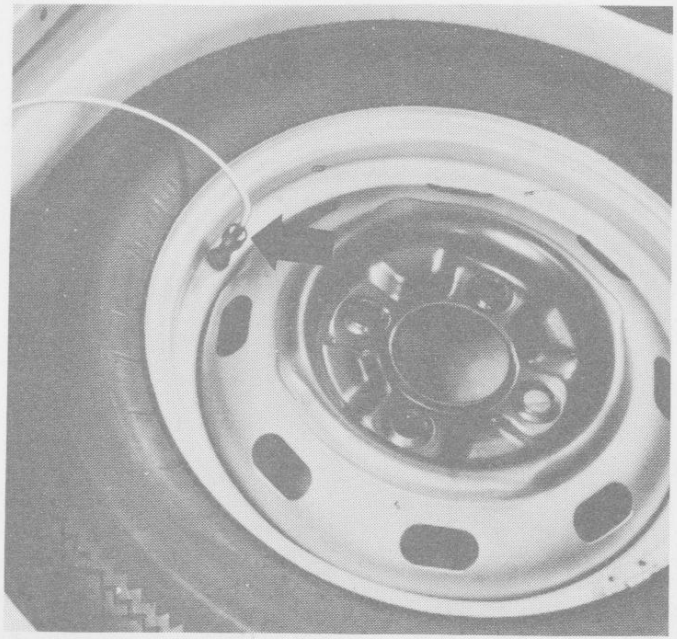
Box spanner
Bar
Hook

Apply handbrake firmly.

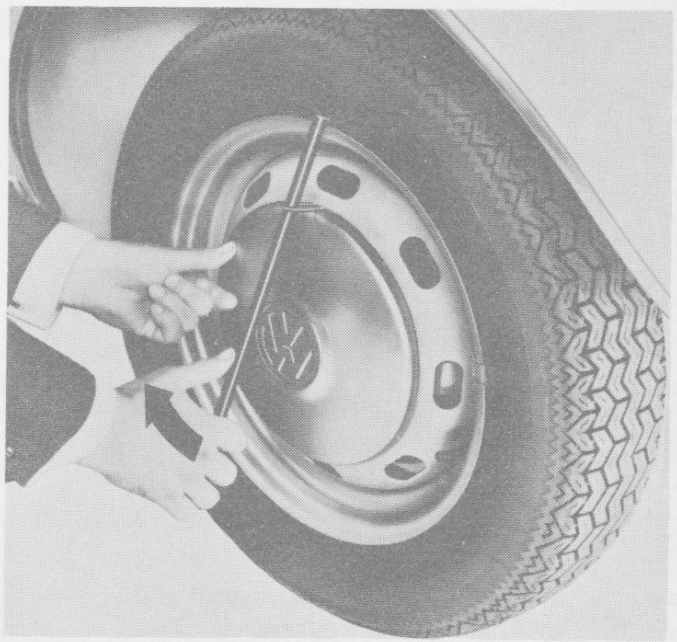
On the side opposite so that on which the wheel is to be removed, scotch a wheel at front and rear so that vehicle cannot roll away when lifted.

Place spare wheel, jack and tools ready for use.

Before the spare wheel can be taken out, the hose for the windshield washer must be screwed off the valve (except on Type 2).



Remove wheel cap with puller hook and jack bar. Hook the puller into the holes in the edge of the cap and lever against the rim with the bar.

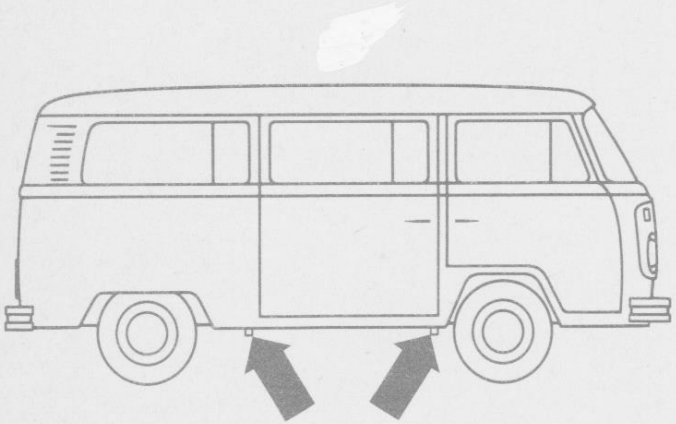


Loosen all wheel bolts (nuts on Type 2) one turn with box spanner and bar.

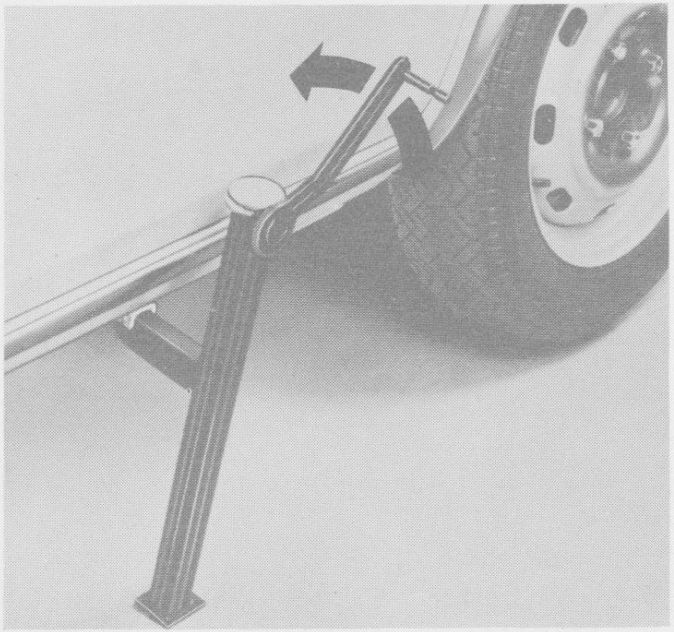
Insert jack arm into square hole under the body. Clean hole thoroughly beforehand if necessary. The jack should be vertical.

If the ground is so soft that the jack can sink into it, place a large strong support under the baseplate.

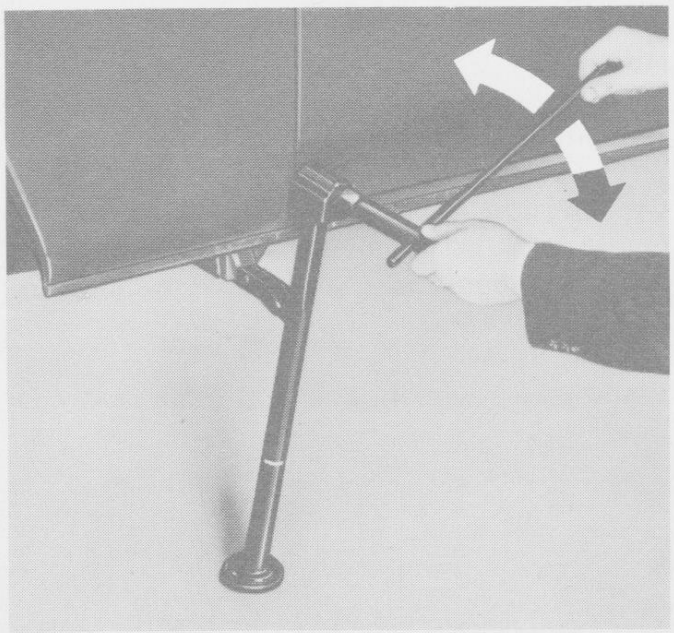
On **Type 2** use the square hole nearest to the wheel to be taken off.



The jack on **Type 1, 3 and 4 vehicles** has a fixed crank.



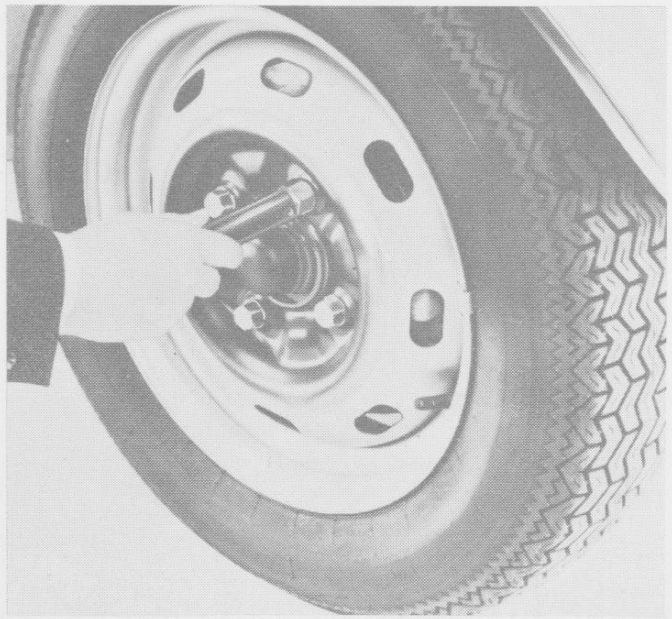
The **Type 2** jack is operated by placing the wheel nut spanner and bar on the hexagon.



Lift the vehicle until the appropriate wheel is off the ground.

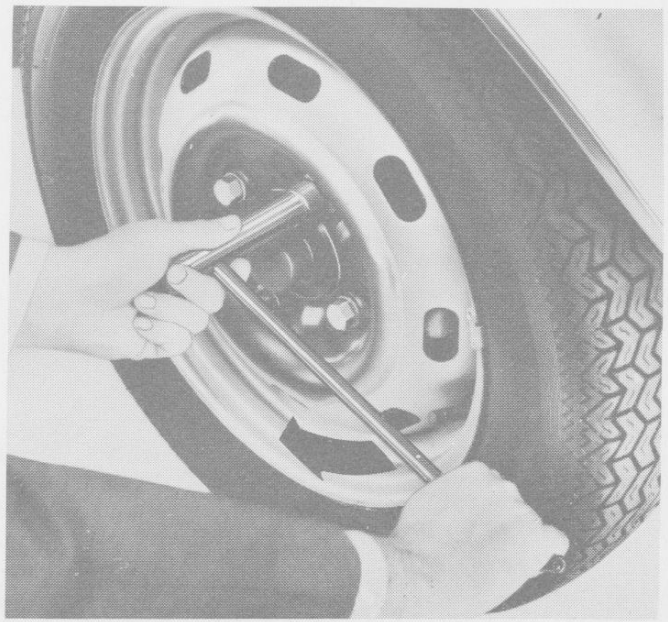
Remove wheel bolts or nuts and take wheel off.

Fit new wheel and tighten bolts or nuts by hand with box spanner.



Lower vehicle.

Tighten bolts or nuts uniformly and diagonally by placing bar in spanner so as to obtain the maximum leverage.



The wheel bolts or nuts can be tightened adequately by any normal healthy adult using the tools provided in the proper way. In case of doubt have the tightening torque checked with a torque wrench at the first opportunity.

Tightening torques				
	Type 1	Type 2	Type 3	Type 4
Nm	120–130	120–140	120–130	120–130
lb.ft.	(87–94)	(87–101)	(87–94)	(87–94)

Install wheel cap

Stow jack, wheel and tools away again.

Check inflation pressure of wheel fitted at the next opportunity and rectify if necessary.

Have the damaged tire repaired as soon as possible: On **Type 1, 3 and 4** vehicles the spare wheel supplies the air pressure for the windshield washer!

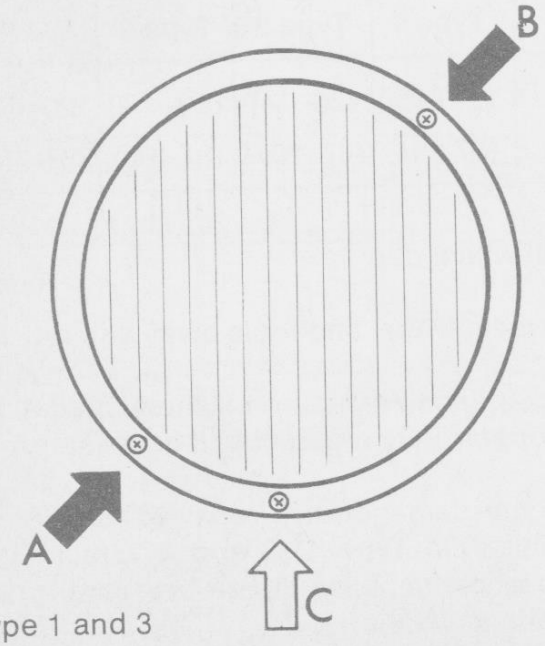
Replacing bulbs

HALOGEN BULBS WITH SAME FLANGE AS
TUNGSTEN BULBS ARE ALSO AVAILABLE

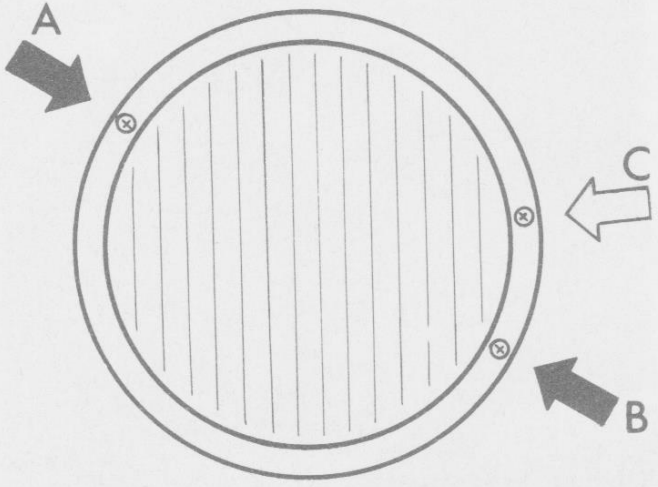
Headlight or parking light Type 1 / Type 2 / Type 3

- Remove screw "C" in chrome ring.
- Lift headlight near the securing screw hole and take it off the retaining lug on the opposite side.
- Pull 3 pin connector off but leave parking light and ground cables on.
- Press retaining ring against reflector, turn it to the left and take off..
- Fit new headlight or parking light bulb.
- Hold new bulb with a piece of clean paper or cloth and not with bare fingers. The lug on the bulb flange must engage in the recess in the reflector.
- Install retaining ring so that the contact tab is on the base of the parking light bulb, then press ring against reflector and turn it fully to the right.
- Install 3 pin connector.
- Install headlight.
- Start the securing screw first, then press headlight over retaining lug and tighten the screw.
- Check headlight alignment.

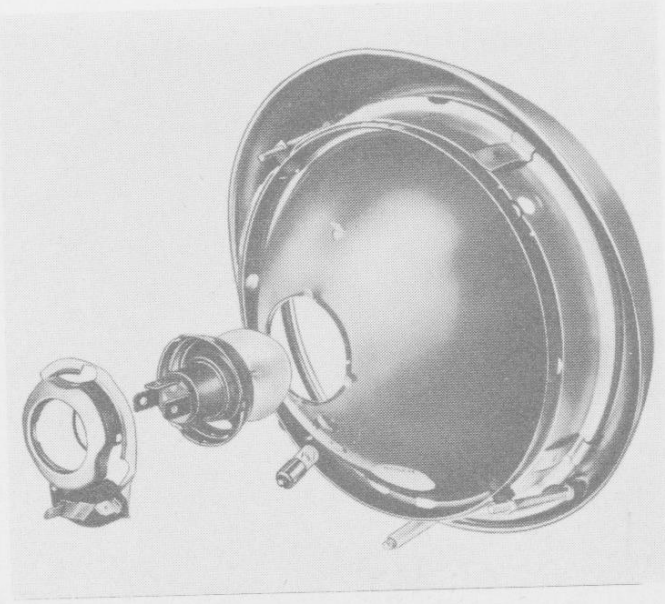
Screw A = Lateral aim
Screw B = Vertical aim
Screw C = Securing screw



Type 1 and 3



Type 2



Type 1, 2, 3

Halogen or parking light bulbs Type 4

- From inside the front luggage compartment, loosen the knurled screws holding protective cap and take cap off.
- Pull rubber cap off and slide it down cable.
- Replace halogen bulb as follows:

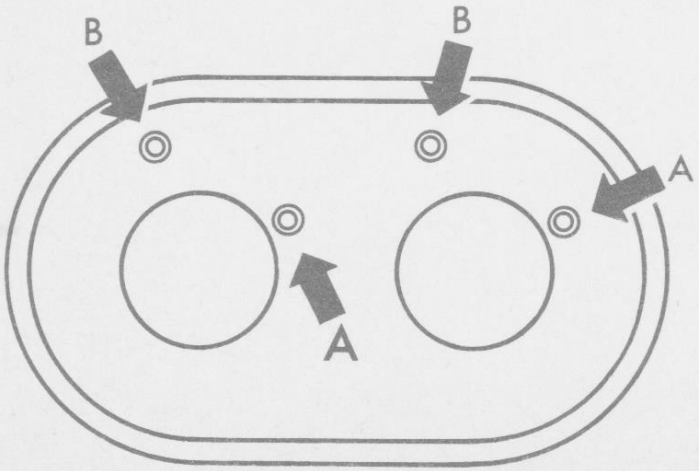
  Pull connector off bulb. Unhook spring clip and swing it clear. Fit new bulb – do not touch glass with bare fingers. Hook spring clip on again and connect cable.

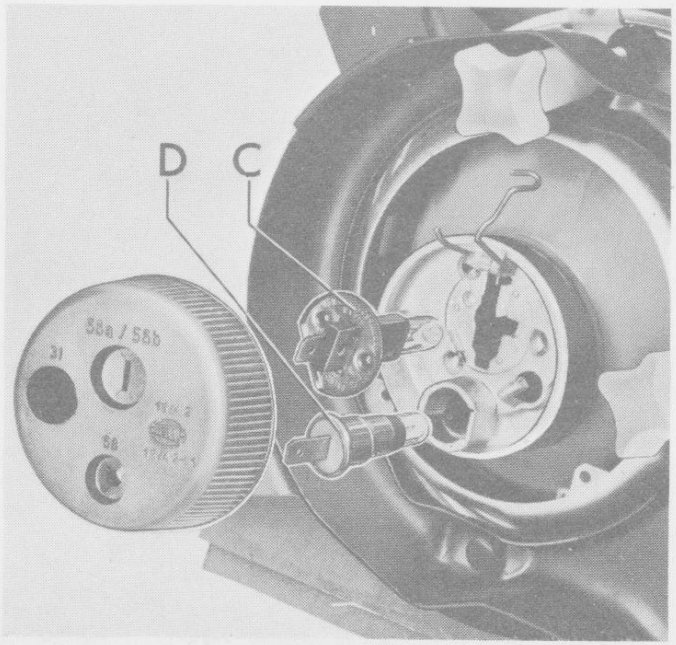
- Replace parking light bulb as follows:

  Pull bulb and holder out of outer reflector. Press bulb into holder, turn it to the left and take it out. Fit new bulb – do not touch glass with bare fingers – and press holder into reflector as far as it will go. Install rubber cap and protective cap. Watch that the rubber seal is located properly.

- After replacing the halogen bulb, check headlight alignment.

Screw A = Lateral aim
Screw B = Vertical aim





The illustration shows the bulb layout of an outer headlight (low beam and parking light). The halogen bulbs in the outer and inner headlights (high beam only) are the same.

C = Halogen bulb H 1 55 W
D = Parking light bulb

Halogen headlight bulb Type 1 / Type 2 / Type 3

- Remove headlight.

- Pull 3 pin connector off but leave parking light and ground cables on.

- Squeeze spring clip together and swing it clear.

- Fit new bulb.

- Do not touch glass of new bulb with bare fingers.

  Install bulb so that the center tab is upwards. (Dimmer shield in bulb downwards).

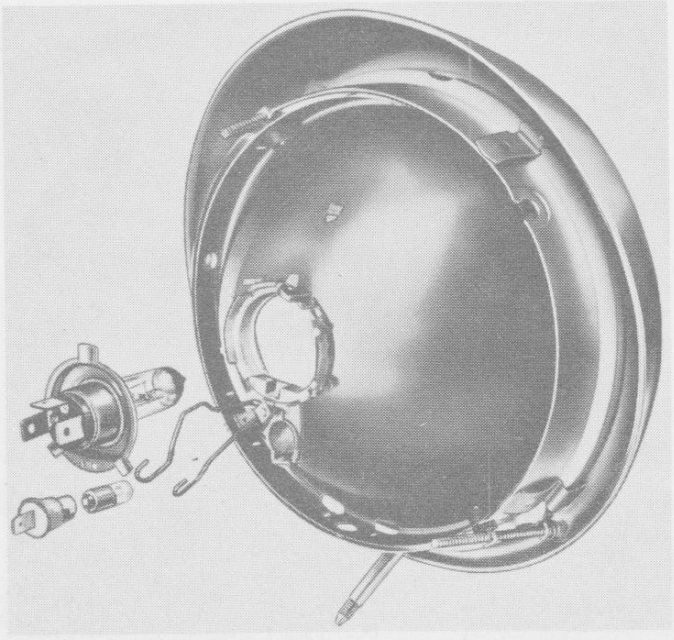
  Swing spring clip over bulb socket, squeeze ends together and engage in the retaining lugs.

  Install 3 pin connector.

- Install headlight:

  Start the securing screw first, then press headlight over retaining lug and tighten the screw.

- Check headlight alignment.



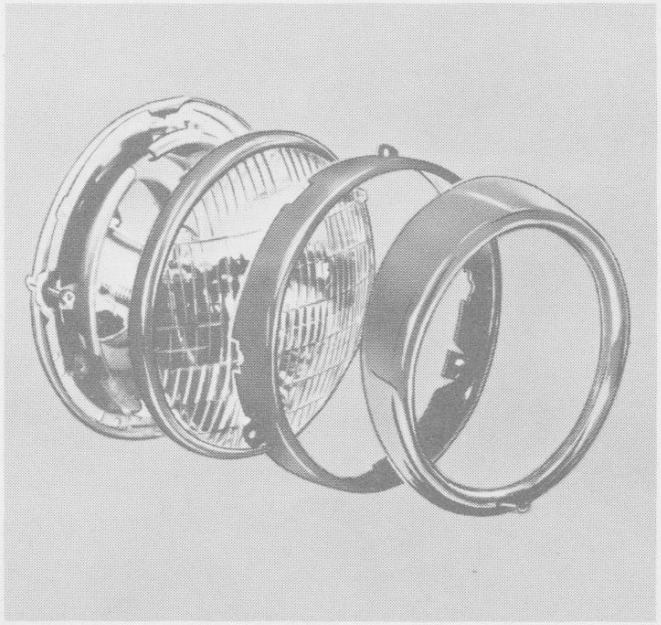
Sealed-Beam headlight Type 1 / Type 2 / Type 3
(Export models only)

Seven inch units with twin filaments are used.

- Remove screw in trim ring and take ring off.
- Remove three short screws in the retaining ring and take ring off.

  Caution! Do not alter the setting of the three long screws.
- Take Sealed-Beam unit out and pull cable connector off.
- When installing the new unit, ensure that the lugs engage properly in the support.
- Before installing the trim ring, check that the rubber seal is located correctly.
- Screw trim ring securing screw in 2 or 3 turns.
- Press opposite side of trim ring over the metal lug on the edge of the headlight recess and then tighten screw.

If no other parts of the headlight have been altered, the headlight alignment will not have changed.

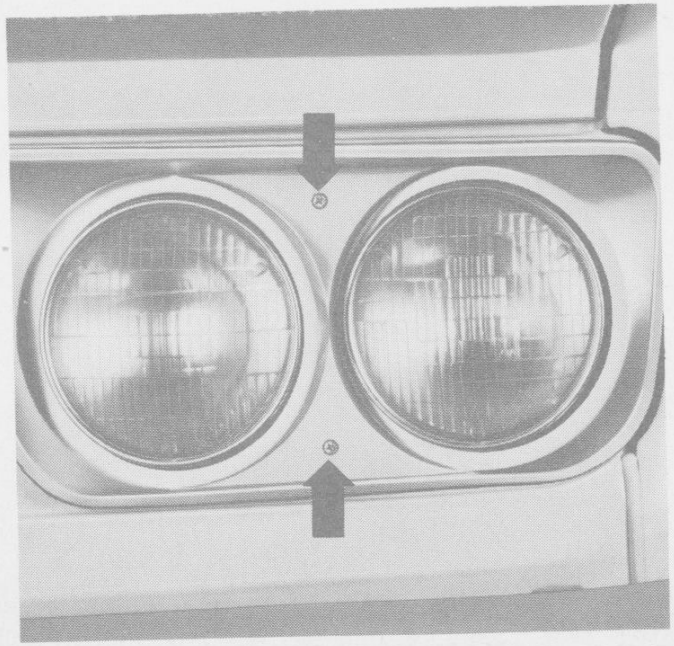


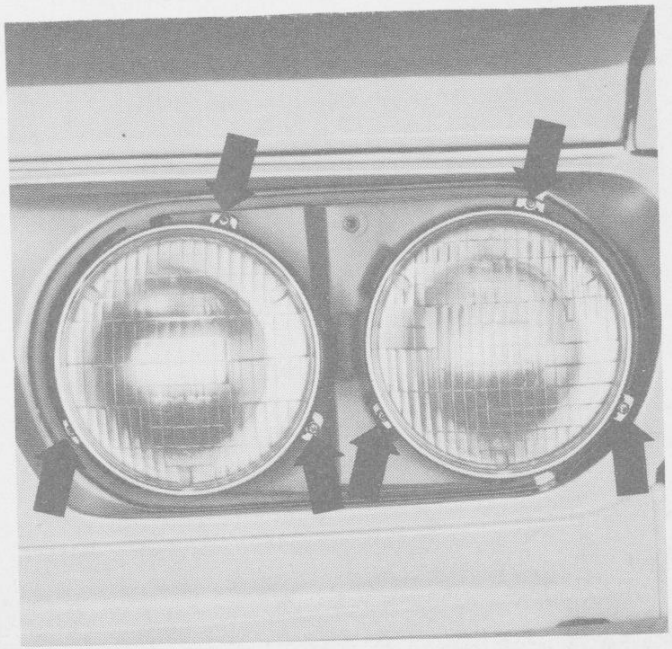
Sealed-Beam headlight Type 4
(Export models only)

Four 5¾ inch Sealed-Beam units are installed.

The inner headlights are high beam only (single-filament) and the outer headlights are high and low beam (twin-filament).

- From inside the front luggage compartment, remove the knurled screws securing the cap and take cap off.
- Pull connector off defective unit.
- Remove two screws in headlight surround and take surround off.
- Remove three screws from retaining ring of unit concerned and take out ring and headlight unit.
- When installing new units, ensure that the unit for the inner high beam headlight has two connecting tabs and the unit for the outer high/low beam headlight has three.
- The lugs on the headlight unit must engage in the recesses in the support.
- When installing the cap, check that the rubber seal is located properly. Do not overtighten the knurled screws.





Rear lights

Type 1 / Type 2 / Type 3	Type 4
• Remove lens • Press defective bulb into holder, turn to left and take out. Bulb positions: Top – Turn signal light Center – Brake/tail light Bottom – Back-up light	The lens is in two parts which can be removed separately. The bulb positions from vehicle center outwards: Inner part: Back-up light – brake/tail light Outer part: Turn signal light

- When installing a twin-filament brake/tail light bulb, the pin nearest to glass must be downwards.
- Install lens. Tighten screws uniformly but do not overtighten.

Front turn signal and license plate lights Type 1 / Type 2 / Type 3 / Type 4

- Remove lens • Press defective bulb into holder, turn to left and take out • Fit new bulb.
- Check that seal is located properly and do not overtighten lens securing screws.

Interior light Type 1 / Type 2 / Type 3 / Type 4

- Place screwdriver between lamp and headlining at front (switch side on Type 2) and lever lamp out.
- Take bulb out • Install new bulb • Insert retaining lug first and then press lamp in until spring engages.

Adjusting headlights

Volkswagen vehicles normally have asymmetric low beams. Sealed-Beam headlights (Export vehicles) must be set in accordance with the regulations of the country in which the vehicles are used.

The correct headlight setting is very important for traffic safety. For this reason the headlights may only be set with a special appliance. The following points should be noted when setting the headlights:

- The tire pressures must be correct.

- The vehicle must be loaded with 70 kg or one person **only.** The location of the load varies:

Type 1	Type 2	Type 3		Type 4	
		Sedan	Variant	Sedan	Variant
in center of rear seat	on driver's seat	in center of rear seat	on driver's seat	in center of rear seat	on driver's seat

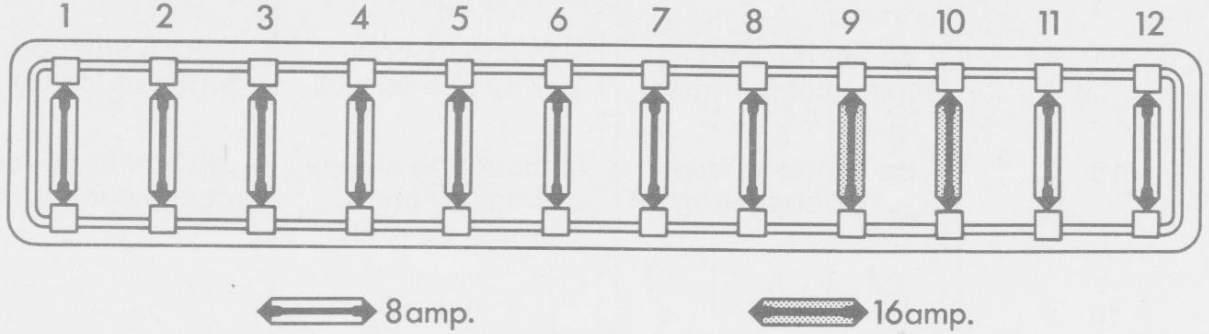
- The headlights must be aligned on low beam only. The setting angle "N" in cm at a distance of 10 m is:

Type 1	Type 2	Type 3			Type 4	
		Sedan	Variant I	Variant II*	Sedan	Variant
10 cm	10 cm	10 cm	30 cm	20 cm	10 cm	20 cm

* 540 kg permissible load

Replacing fuses

To prevent short circuit or overloading damage to the cables and components, the individual circuits are fitted with fuses. The fuse box has a transparent lid and is located under the instrument panel. The numbers of the fuses are marked on the lid as shown below.



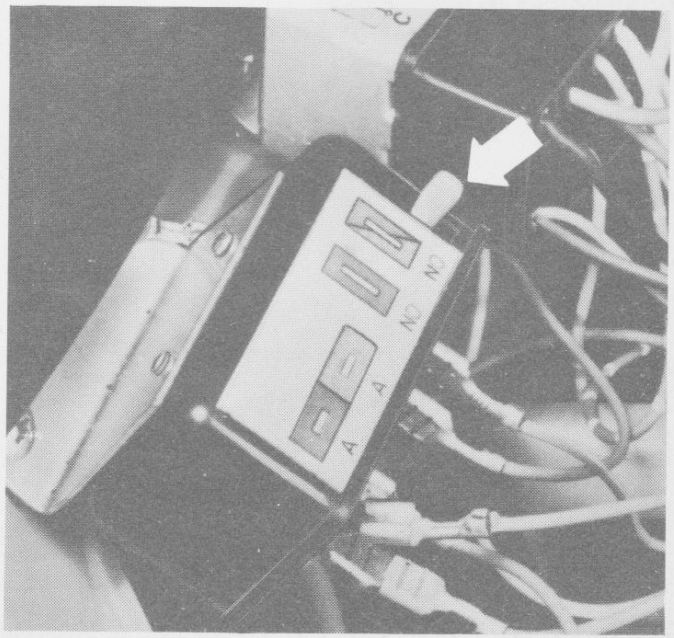
- A blown fuse can be recognized by the break in the fuse wire.
- If a newly replaced fuse blows again in a short time, the electrical system must be checked immediately in a VW workshop and the defect rectified.
- Never attempt to "repair" fuses because this will cause serious damage elsewhere in the electrical system.
- Always have a few spare 8 and 16 ampere fuses in the vehicle.

When replacing a fuse

Do not touch the metal part.

Do not bend the fuse clips.

The fuse must fit tightly.



Type 4 – Heater safety switch

If the gasoline heater does not work or stops running at any time, the safety switch (on left of engine compartment, on left under seat in Variant) may have been actuated.

After 3 minutes, move red lever of safety switch (see illustration) to the rear and release it.

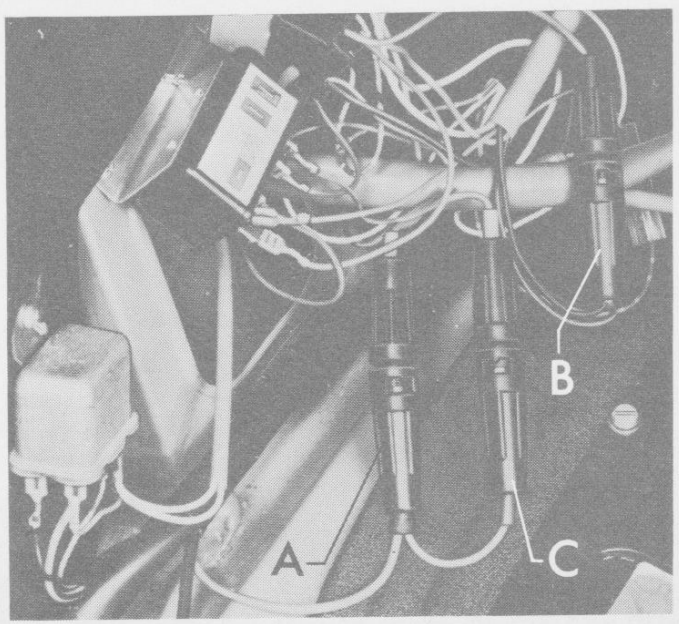
If the heater does not work now or if the switch operates again after a short time, the heater has a defect which can only be rectified in a VW workshop.

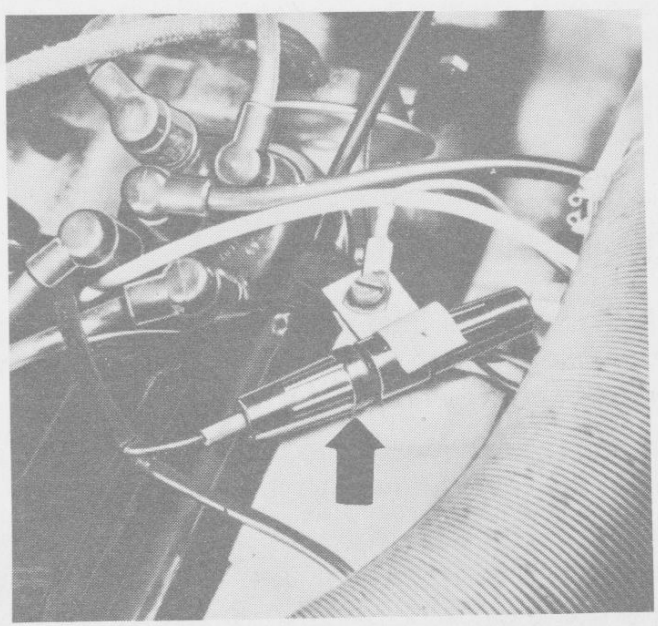
Additional fuses in separate holders

Component	Fuse amperage	Fuse location			
		Type 1	Type 2	Type 3	Type 4
Heated rear window (main current)	8	under rear seat	–	under rear seat	left of engine compartment* (C)
Back-up lights	8	on fan housing in engine compartment	in engine compartment near coil	in engine compartment near coil	in engine compartment near distributor** (right hand picture)
Heater	16	on heater in front luggage compartment	on heater in engine compartment (main current)	on heater in front luggage compartment	–
Heater a – Main fuse	16	–	–	–	on left in engine compartment* (A)
b – Overheating switch	8	–	–	–	on left in engine compartment* (B)
Warm air fan (only with 1.7 liter engine)	16	–	in engine compartment near fan motor	–	–

* **Variant:** on left under rear seat

** Only on vehicles with manual transmission





Replacing fuses in holders

The holder is in two parts. Press two parts together and twist in opposite directions until holder can be opened. Install new fuse. Press two parts together lightly and turn until the spring catch engages.

Fuse table

Component	Fuse Number				
	Type 1		Type 2	Type 3	Type 4
	1300	1303	*		
Low beam right	3	3	3	4	3
Low beam left	4	4	4	3	4
High beam right	6	5	5	6	5
High beam left	5	6	6	5	6
High beam warning lamp	5	6	6	5	6
Headlight flasher	9	9	–	8	–
Parking light right	1	1	2	2	2
Parking light left	1	1	2	1	1
Brake light	11	11	12	11	12
Tail light right	1	1	2	2	2
Tail light left	2	2	1	1	1
Parking light circuit right	–	–	–	2	2
Parking light circuit left	–	–	–	1	1
Emergency light system	8	8	8	8	8
License plate light	1	1	2	7	7
Luggage compartment light	–	–	–	7	–
Interior light rear	–	–	9	–	–
Interior light	9	9	8	8	8
Fresh air fan	10	10	7	10	10
Wiper motor	10	10	10	10	10
Electric fuel pump (fuel injection engine)	–	–	–	9*	9
Heated rear window	10**	10**	12	10**	10**
Horn	11	11	12	11	12
Dual circuit brake warning lamp	12	12	12	11	12
Cigar lighter	–	–	–	–	9
Temperature regulating switch (warning lamp)	–	–	–	–	1
Heating (switch current)	–	–	9+10	–	9
Temperature regulating switch (switch current)	–	–	–	–	10
Warning lamps (generator, oil pressure, fuel, turn signals)	12	12	11	11	11

* no other components to be connected
** switch current

Battery care

Engine starting and the satisfactory operation of the electrical system depend to a large extent on the condition of the battery. The battery should therefore be checked and maintained regularly.

The battery is located:

Type 1	Type 2	Type 3	Type 4
under the rear seat	in engine compartment	under rear seat	under the left front seat

Checking and maintaining the battery

Preparation:

Type 1	Type 2	Type 3	Type 4
lift rear seat or take it out*	take battery out	lift rear seat or take it out*	tilt seat right forward*

- The acid should be exactly up to the mark.
- If level is low, add distilled water. To avoid damage caused by overflowing acid, do not top up above the mark.
- The battery posts and cable terminals must be cleaned and coated with terminal grease.
- The ground strap must make metal to metal contact with the body.

How often distilled water should be added depends on the vehicle operating conditions and the season of the year.

If the vehicle is frequently driven long distances in the daytime with lights and starter being used very rarely, the battery will have to be topped up with distilled water much more often than when these conditions do not apply. In general the battery must be checked more often in the summer than in the winter.

VW drivers in hot countries who do a lot of motoring are advised to check the acid level at least every 8 days.

* See "Removing and installing seats".

Removing battery

1. Take battery cover plate off – **Type 2 only.**
2. Lift cover over positive terminal.
3. Pull diagnosis test cable off.
4. Detach both terminals. To avoid short circuits detach the ground cable (–) first.
5. Remove battery securing clamp.

Type 1	Type 2	Type 3	Type 4
Remove nut with wheel bolt wrench	Remove nut with open-end wrench. 1.7 liter engine: Remove air cleaner	Remove nut with wheel bolt wrench	Remove screw with Phillips screwdriver

Some more important points:

- Do not short the battery to ground. This causes the battery to get very hot and it can explode. Furthermore, sparks may ignite the gas generated during the charging process. Never use a naked flame near the battery.
- Battery acid is corrosive and must not get into the eyes or onto skin and clothing.
- The engine must not be run with the battery disconnected as this will damage the electrical system.
- Before quick charging the battery disconnect both terminals.
- A starting boost may only be given with the battery **connected** and using a **special** quick charging appliance.
- If the vehicle is to be taken off the road for a long time, the battery should be removed and charged about every 4 weeks as otherwise it will discharge itself in time and this will damage it.
- When putting battery back in vehicle, always connect the positive cable (+) first. Do not attempt to interchange the cables.

Test wiring and socket

Every Volkswagen has a special test wiring network which is connected to the socket shown here which is located in the engine compartment.

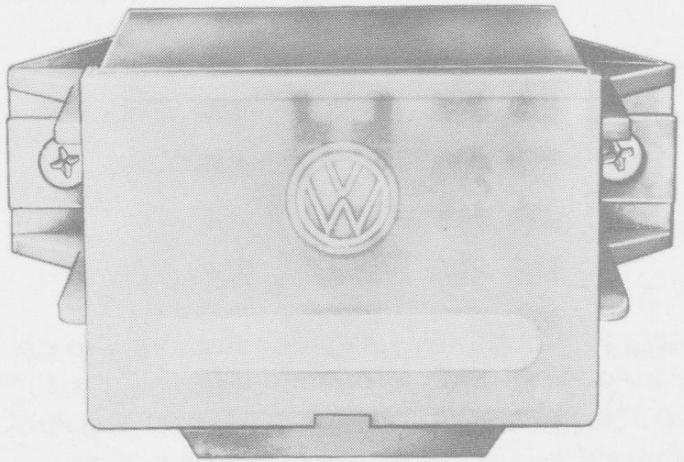
With this socket the vehicle is connected to the electronic system of the diagnosis stand which checks numerous items in the test programme – which is tailored to suit each vehicle – without the help of the test mechanic.

The results are printed on a test report at the same time.

The socket must only be used to connect the vehicle to the Diagnosis stand.

Keep the lid of the socket closed at all times.

COMPUTER DIAGNOSIS CARD 04

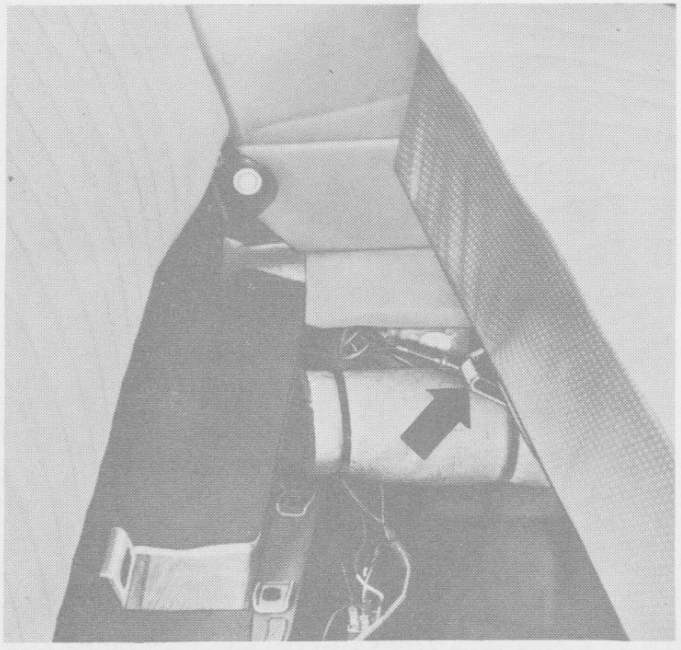


Removing and installing seats

(where necessary, in order to get at jack, spare wheel and battery)

Rear seat Type 1

To take out: Lift and pull forward slightly, lift right up on **righthand** side and take out at an angle.



To put back: Lift into vehicle at an angle – **lefthand side** down – until seat is behind lock pillars and then press down on the right-hand side. Lift front edge slightly, push seat under the backrest, then press the front edge down firmly behind the cross support.

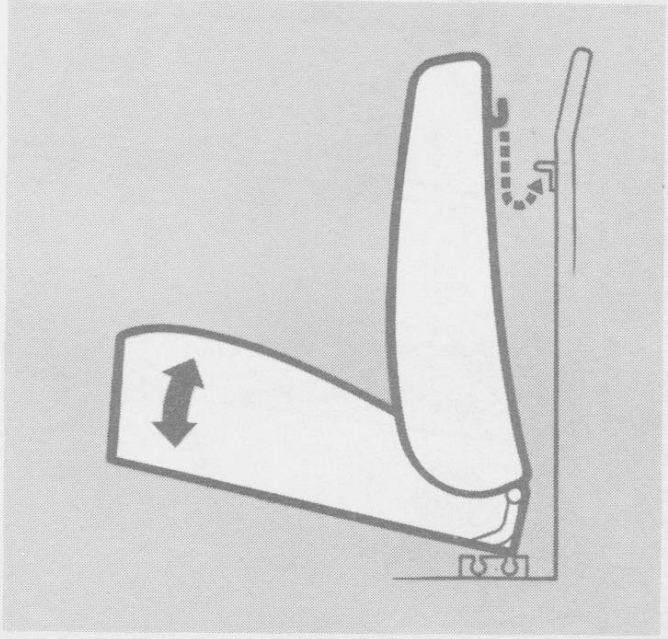
Caution! When removing and installing the seat, take care not to damage the backrest with the retaining hook on seat frame (arrow).

It is not necessary to take seat right out to get at the jack and battery – in most cases it is sufficient just to lift seat at the front.

Front passenger seat Type 2

To take out:
Lift the seat at the front until the backrest hooks out of the bracket on the partition. In this position, lift seat out.

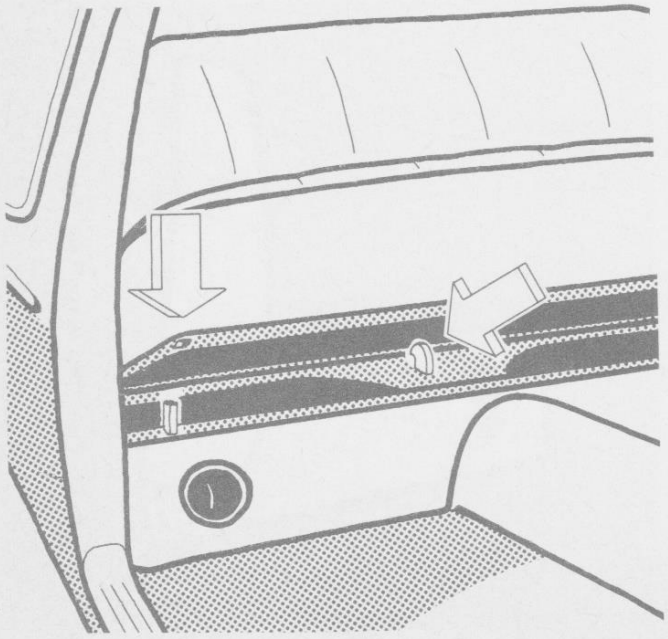
To put back:
Fold seat together and place it in the retainers. Ensure that the backrest engages properly in the bracket on the partition.



Rear seat Type 3

To take out: Lift front of seat off the retaining pins on the cross support first, then pull seat up uniformly at front and rear and take out.

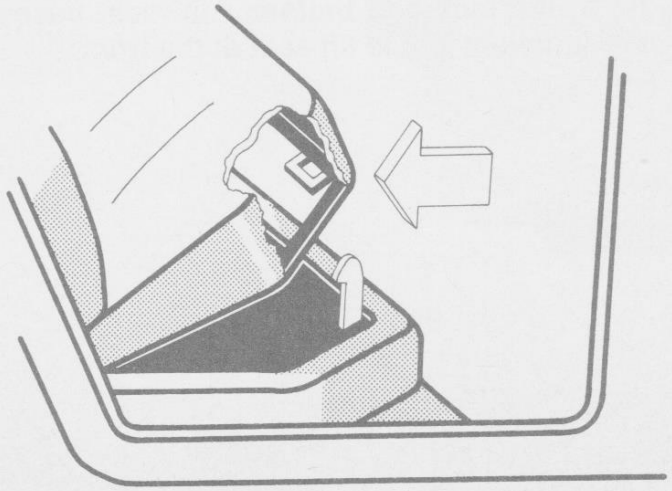
To put back: Push seat under the backrest first and then press front down on to the retaining pins.



Rear seat Type 4

To take out: Press firmly against seat frame in direction of arrow, unhook left and right sides one after the other and then take seat out.

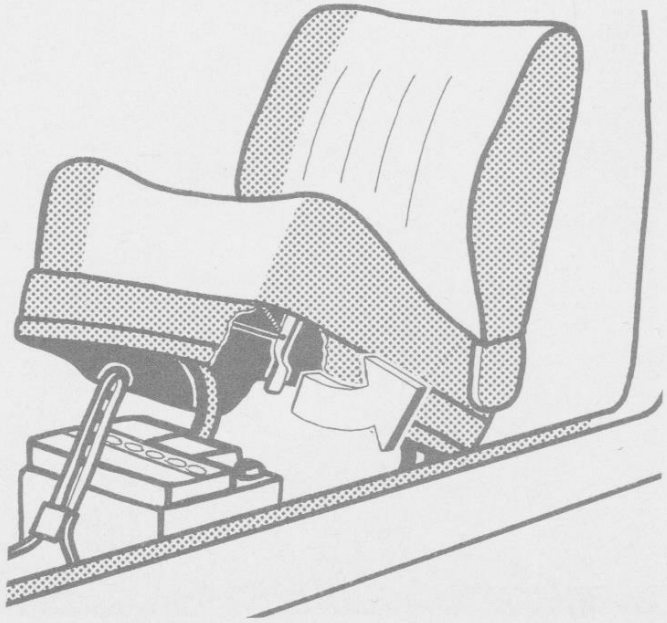
To put back: It is essential to push the seat as far as possible under the backrest on each side so that it hooks properly into position.



Driver's seat Type 4
(passenger's seat on RHD models)

The seat must be lifted to get at the battery.

- Push seat to the rear.
- Fold backrest forward (two-door models).
- Adjust backrest until it is as far forward as possible (four-door models).
- Pull the release lever at front under seat on door side, outwards.
- Lift seat out of height adjusting support and swing it to the rear.



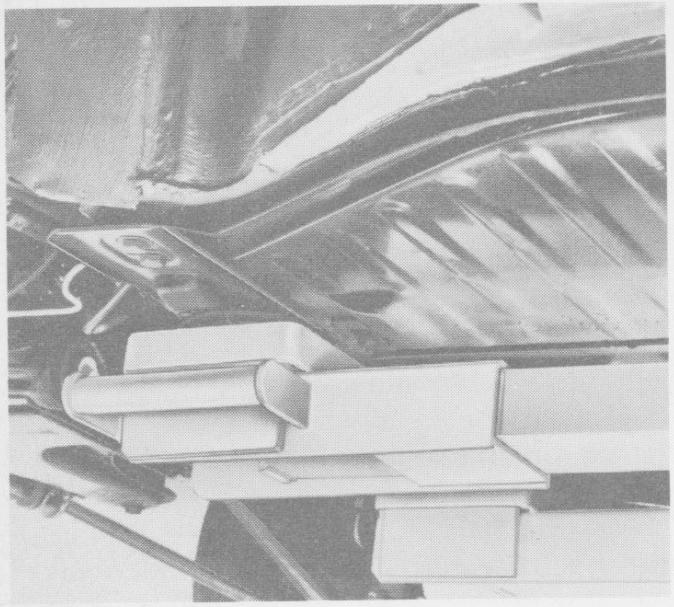
Towing

All Volkswagen vehicles have towing eyes at front and rear. In order to avoid damage when towing or being towed, note the following points:

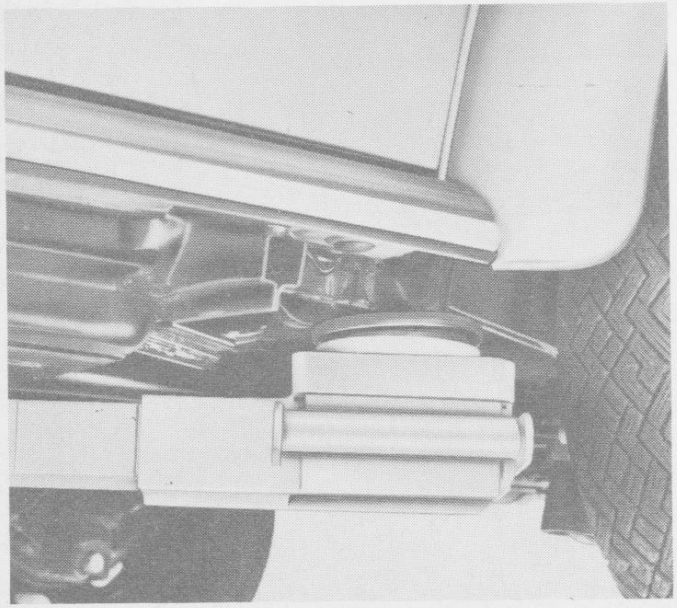
- Towropes must only be attached to the towing eyes.
- The towrope must be slightly elastic to reduce jerking on both vehicles. Use only plastic towropes or towropes with spring links.
- The driver of the towing vehicle must use his clutch very carefully when moving off and when changing gear.
- The driver of the vehicle being towed must ensure that the towrope is always taut.
- The ignition must be switched on in the vehicle being towed so that the steering is not locked and the turn signals and brake lights work.
- Caution! When being towed in a vehicle with a brake servo, remember that when the engine is not running you get no servo assistance and must press the brake pedal harder than normally.
- When a **vehicle with automatic transmission** (Type 2, 3, 4) is being towed, the instructions in the special leaflet "Vehicles with automatic transmission" must be noted.

Lifting with a vehicle lift

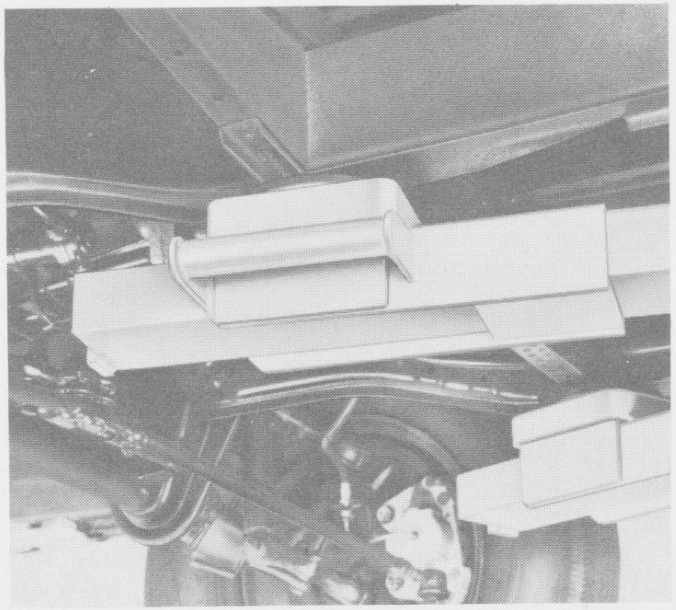
The vehicle must be lifted only at the positions shown here, otherwise damage will occur and there is a risk of accident.



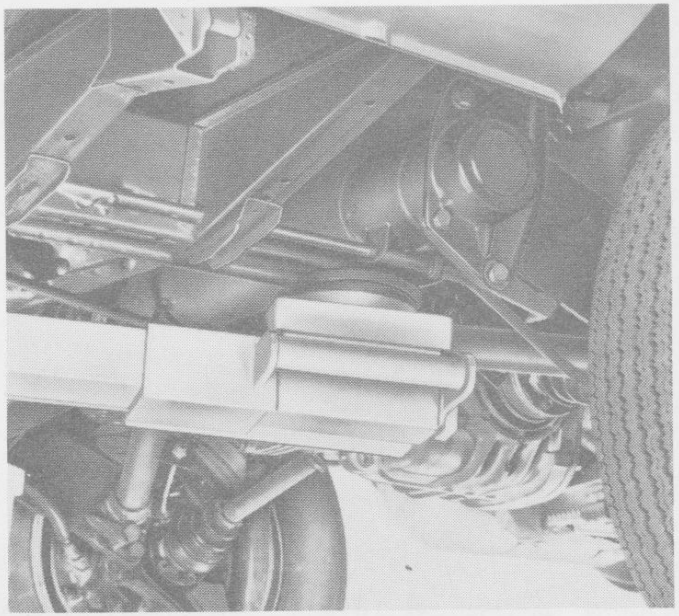
Type 1 front Frame head



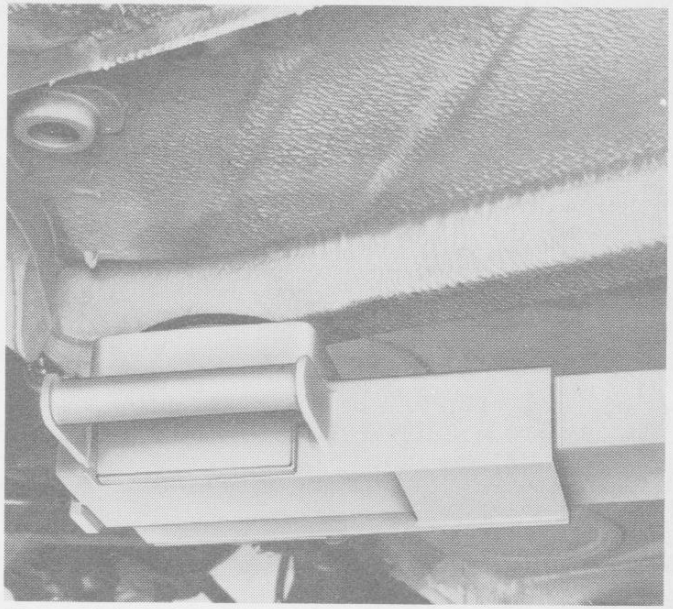
Type 1 rear Cross tube flanges or ends of cross tube



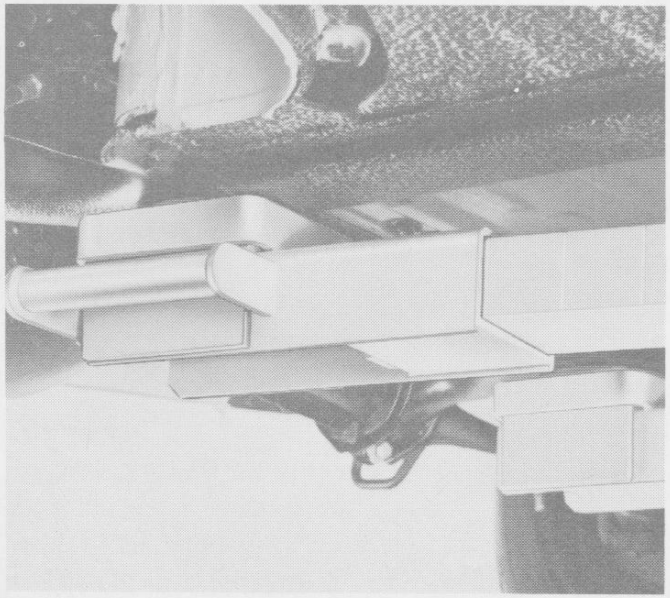
Type 2 front Side member



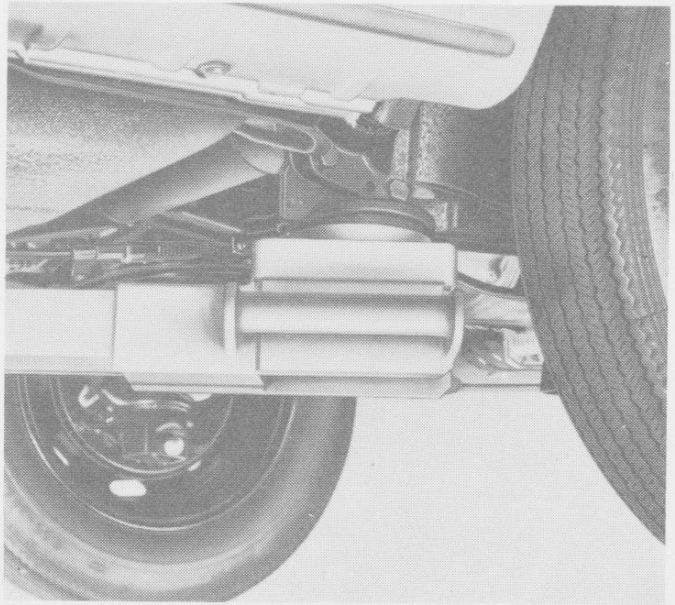
Type 2 rear Side member or outer ends of cross tube



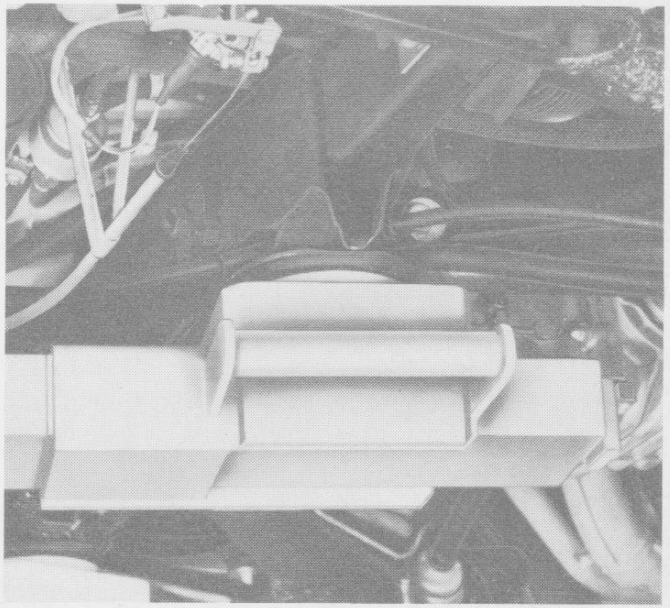
Type 4 front Side member



Type 3 front
Front cross member



Type 3 rear Cross tube flanges or ends of cross tube



Type 4 rear
Support plates on rear axle carrier

Lifting with a trolley jack

When lifting the front or rear end with a trolley jack, the jack must only be placed under the following vehicle parts:

	Type 1		Type 2	Type 3	Type 4
	1200/1300	1303			
Front	Front axle beam	Frame head	Front axle beam	Front axle beam	Front axle carrier
Rear	Frame cross tube			Sub frame cross tube	Rear axle carrier

Always use a suitable adaptor: To avoid damage, ensure that pressure is not applied to unsuitable parts near the lifting point.
The adaptor must be shaped so that there is no danger of the vehicle slipping off.

As a general rule for all Type 1, 2, 3 and 4 vehicles: Never lift under the engine or transmission as this will cause serious damage.

Caution – Type 4: Do not place the jack under the spare wheel well as this will cause damage even if a large sized piece of packing is used.

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