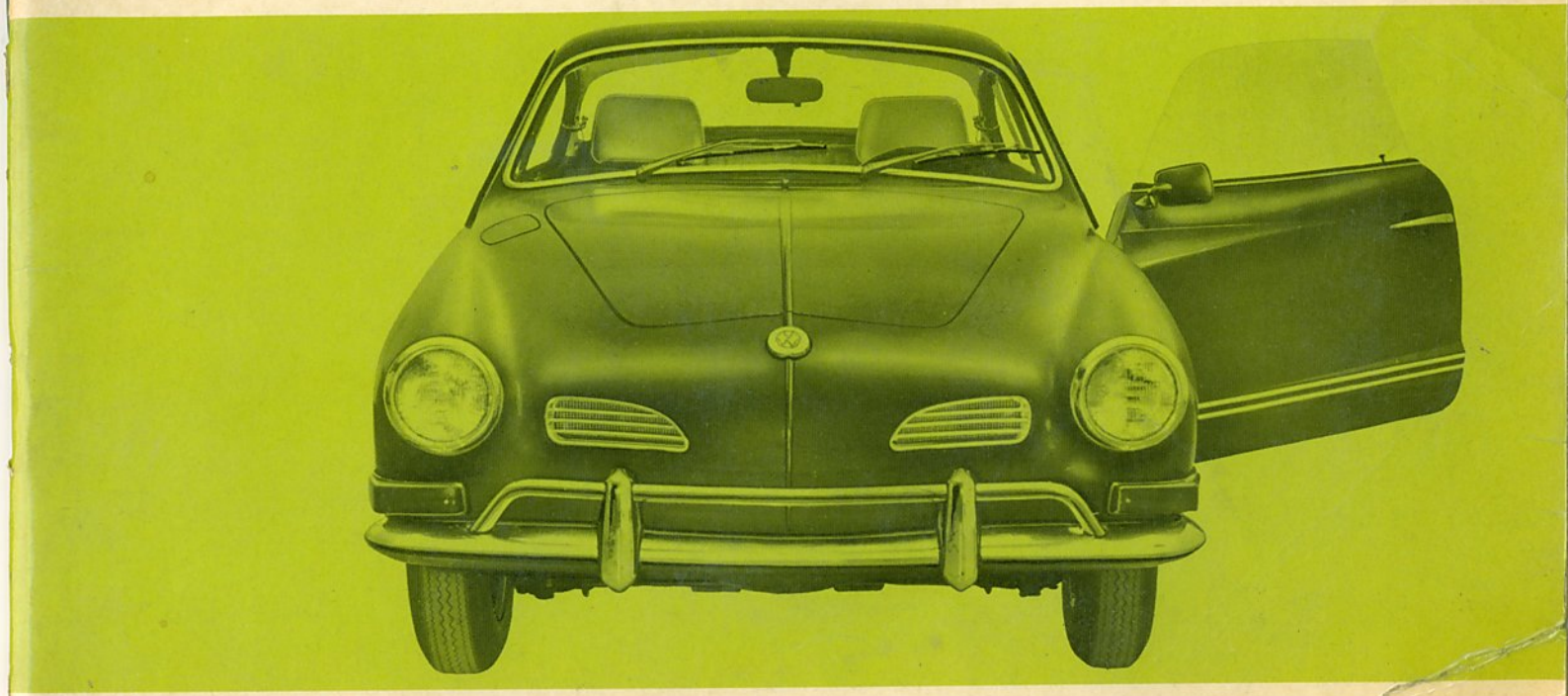
Volkswagen Owner's Manual

- Store Demo -



Volkswagen Owner's Manual

1970 Models

Karmann Ghia Coupé and Convertible

VOLKSWAGENWERK AKTIENGESELLSCHAFT

Dear VW Owner:

Congratulations!

You are now the owner of a Volkswagen. A lot has gone into the manufacture of your car. Including advanced engineering techniques, rigid quality controls and thorough inspections. The engineering and safety features that have gone into your VW will be enhanced by . . . you.

You, the safe driver — one who knows his vehicle and all the controls
one who maintains his vehicle properly
one who uses his driving skills wisely

Because safe driving is important to you, we suggest that you read this manual carefully, maintain your VW properly and get into the habit of following the check list shown below each time you use your VW.

Before getting behind the wheel:

1 — Make sure that the tires are inflated properly.

2 — Watch the tread depth indicator on the tires. Look for bruises and wear.

3 — See that all windows are clean and unobstructed.

4 — Check that headlight and tail light lenses are clean

5 — Check that all lights are functioning properly.

6 — Check turn signal lamps and indicator light (ignition on).

In the driver's seat:

1 — Position seat properly for easy reach of controls.

2 — Adjust inside and outside mirrors for unobstructed rear view.

3 — Fasten seat belts.

4 — Check brake warning light (ignition on).

5 — Check brake operation.

6 — Make sure that all doors are properly closed and locked.

And when you are on the highway:

1 — Always drive defensively. Expect the unexpected.

2 — Use signals to indicate turns and lane changes.

3 — Turn on headlights at dusk.

4 — Follow at a safe distance. A good rule of thumb is to allow a minimum of one car length for each 10 mph of speed.

5 — Reduce speed during night hours and inclement weather.

6 — Observe speed limits and obey highway signs.

7 — When tired, get off the highway, stop and take a rest.

8 — Use emergency lights when stalled or stopped for repairs.

9 — Pull hand brake lever when vehicle is stopped or parked.

Do not invite car theft!

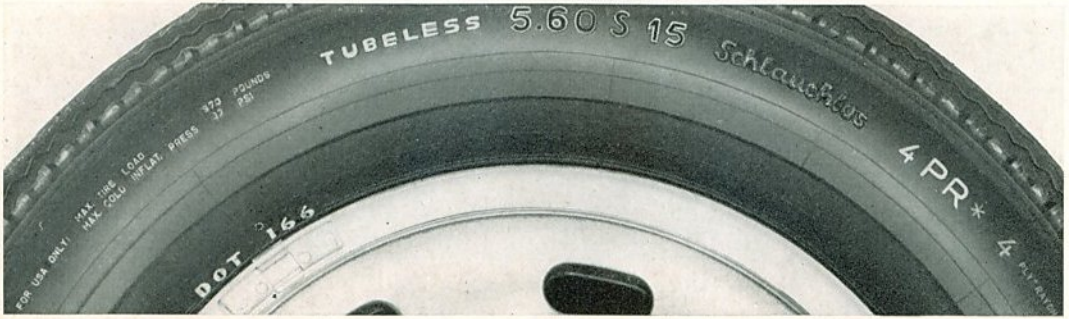
An unlocked car with the key in the ignition offers both opportunity and temptation.

Therefore, a steering wheel lock and a buzzer alarm are standard equipment in your 1970 Volkswagen. The buzzer will sound if you open the driver's door while the key is in the steering/ignition lock. It is your reminder to take the key and lock the doors.

In accordance with the Federal Safety Regulations, the chassis number of your car is also located on the left of the instrument panel and can be seen from the outside. This precaution is taken for your protection — to aid in the apprehension of thieves and the recovery of stolen vehicles.

MANUFACTURED BY **VOLKSWAGENWERK AG** 0869
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE. 1 2

This sticker assures you that your 1970 Volkswagen complies with all Federal Motor Vehicle Safety Standards which were in effect at the time the vehicle was produced.



The tires of your Volkswagen conform to the Federal Motor Vehicle Safety Standards.

When purchasing replacement tires, make sure that they show the same specifications for tire seize, load carrying capacity etc. This also applies to VW recommended alternate replacement tires.

Contents

All pictures are of the Karmann Ghia Coupé with four speed synchromesh transmission and the text is based on this vehicle. Where the controls, equipment and technical data of the Automatic-Stick Shift and the Convertible differ considerably, attention is drawn to the difference.
Specifications are subject to alterations without notice.

Get to know your new car quickly so you can start off on your first trip with complete confidence. The first part of this booklet deals with the operation of your Volkswagen. We urge you to read it carefully.

The second part tells you everything about winter driving and care of the car. It also contains some useful do-it-yourself tips. Plus some information on the proper fuel and oil, lubrication and technical data.

When you have studied this manual, you will know how to operate your car properly. Then you can expect many years of reliable and economical service from your car.

This brings us to the Volkswagen Maintenance Record — which you also receive with the car. The Record explains what VW Diagnosis and Maintenance is all about. And tells you how to keep your VW in top driving condition. Always have the Volkswagen Maintenance Record with you when you take the vehicle to an Authorized VW Dealer for service — it helps establish proper contact with the service department staff. In your own interests: Have your Volkswagen serviced as indicated in the Volkswagen Maintenance Record right from the start. Proper treatment plus complete proof of all maintenance work carried out can be of vital importance should you have occasion to make a claim under warranty.

Identification plate, Chassis Number, Engine Number

The identification plate

is found under the front hood beside the spare wheel. The 10 digit number after the words "Fahrgest. Nr." is the chassis number. It describes the model number, model year and serial number of the vehicle as shown in this sample:

14 0 2000356

Model Year Serial Number

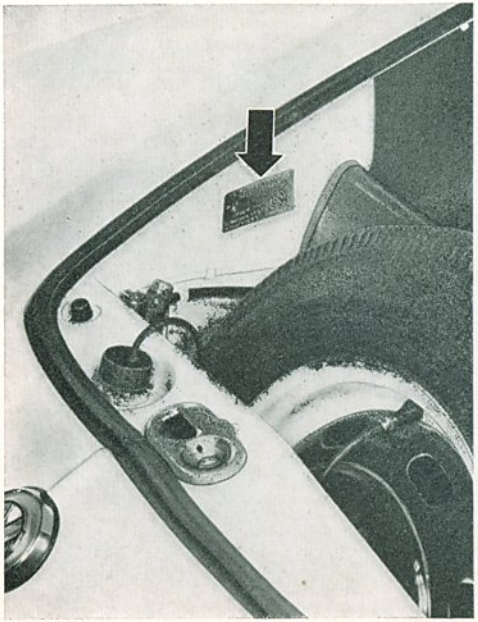
The Chassis Number

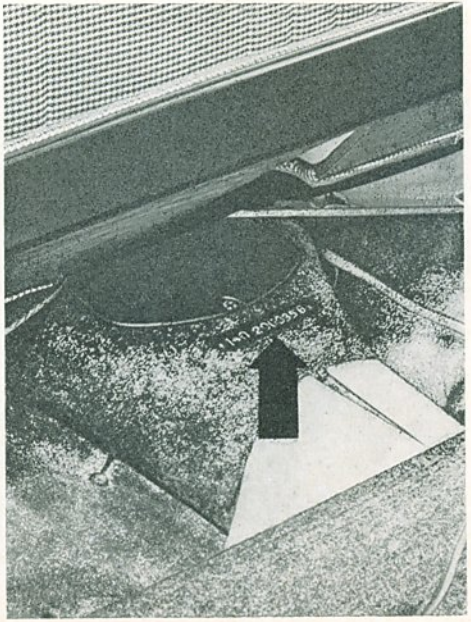
is also found on the frame tunnel under the jump seat . . .

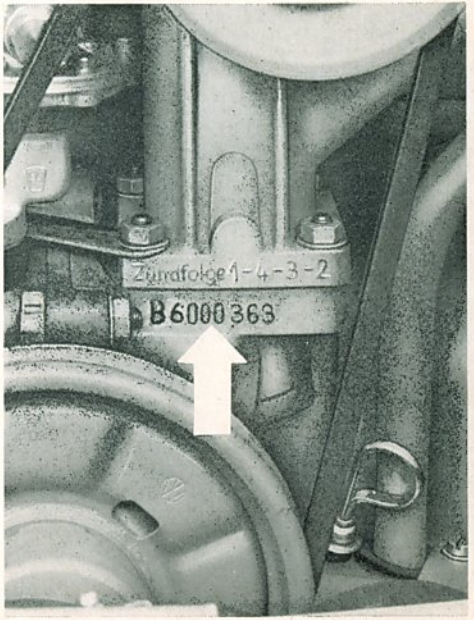
. . . and on the instrument panel so that the Number is visible from outside the car.

The Engine Number

is on the generator support flange.





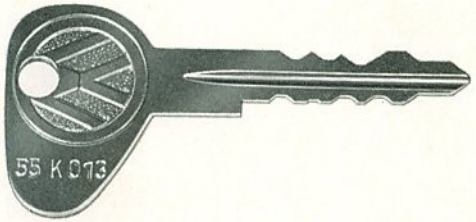


Operation

Keys

Only one key is required to unlock and lock the doors and to start the engine. The other key locks the glove compartment.

Be sure the key numbers are recorded in the front of the VW Maintenance Record. If you should lose a key, you can obtain a replacement from your Authorized Volkswagen Dealer.



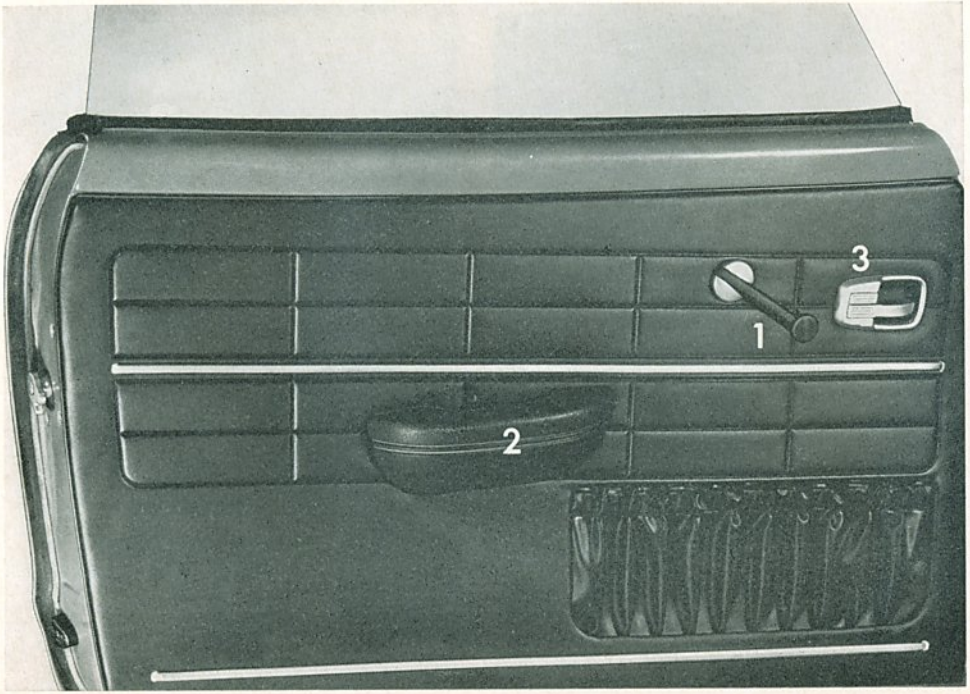
Doors

The doors can be closed more easily if a window is opened slightly.

1 — **Window crank**

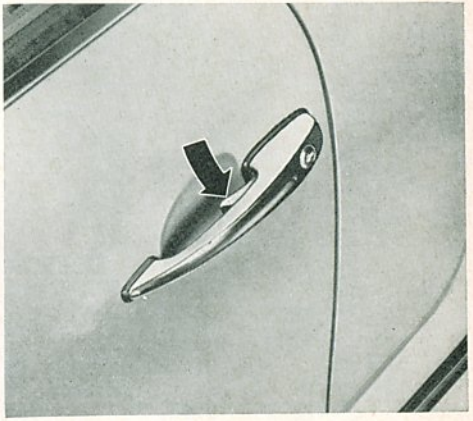
2 — **Armrest and door closing grip**

3 — **Inside door handle with locking lever**



The doors cannot be opened from inside or outside unless the locking levers are pulled out.

When leaving the vehicle, just push in the locking lever and pull the trigger in the outer handle as you close the door. The vehicle is then locked.

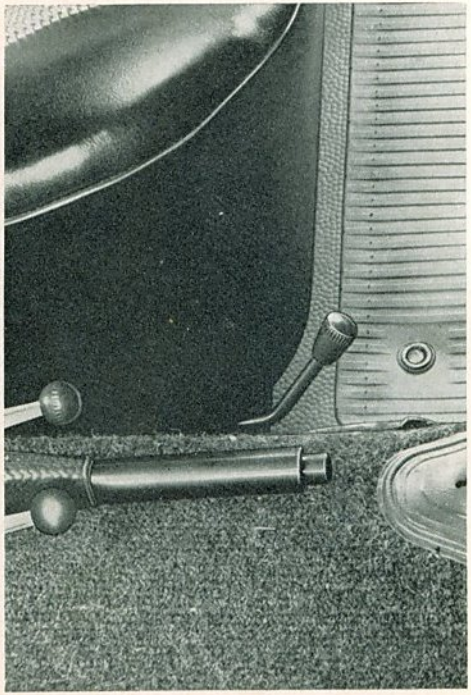


If the door closes by itself after the locking lever has been pushed in, it will not lock because the locking lever will spring out automatically. This is an additional safety measure to prevent you from being locked out if the door should accidentally slam shut while the key is still inside the vehicle.

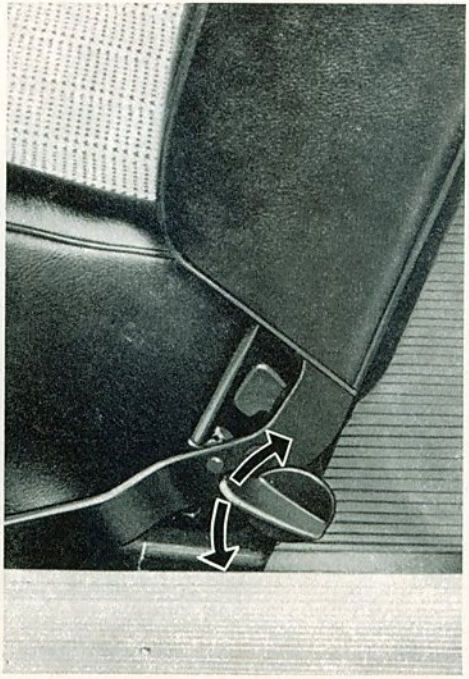
Seats

When driving, you should sit comfortably. Volkswagen's separate front seats provide this comfort. You can alter seat position and backrest rake to suit you. This is quite simple —

— just lift the lever at the front right hand side of the seat and slide the seat forward or backward. After adjusting, release the lever and move the seat slightly until it is locked securely in position.



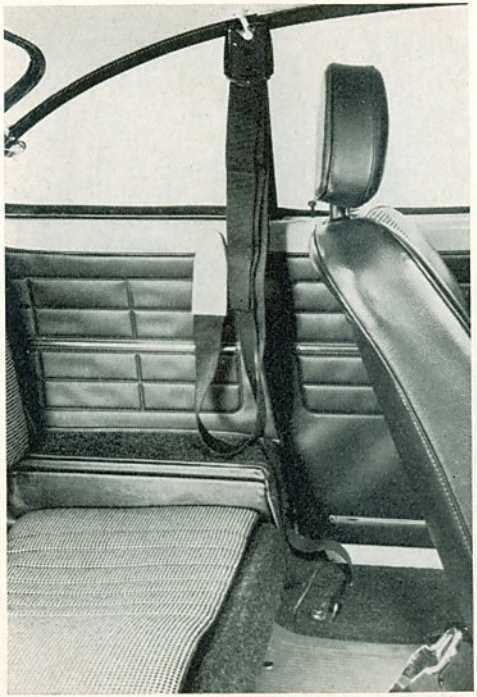
The backrest angle can also be set to four different angels by turning the lever. Try them out until you find the angle which suits you best.



As a safety feature, the backrests of your Volkswagen are secured against tilting forward. To release the lock, just pull the knob on the side of the backrest upward.

Seat Belts

Your Volkswagen Karmann Ghia is equipped with a seat belt for each front seat. Occupants of the vehicle should wear the belts at all times. Shoulder belts should not be worn by persons less than approximately 55 inches in height. The combination lap/shoulder belt is completely adjustable to fit different sized persons and to allow for seat and backrest adjustment. When not in use, the belt should be hung on the hook behind the seats by means of the hole in the buckle. This prevents the belt from lying about and getting dirty and keeps the belt handy.



Operation: After sitting down and adjusting the seat and backrest positions, pull the belt buckle across in front of you to the center of the car. A light push of the center of the buckle against the stirrup will make the buckle engage with a click. Be sure the belt is not twisted. Adjust lap and shoulder belt by pulling belts until they fit snugly across body. Take up any slack of the loose belt end by moving the slide. To lengthen either section of the belt, release buckle from stirrup, hold buckle at a right angle to belt and pull belts through buckle.

To release the belts grasp the buckle and pull upward. This opening direction is shown by an arrow on the buckle.

Do not strap in more than one person with each belt.

Keep belts clean. Wash belts with mild detergent without removing from vehicle. Dry belts in the shade until the are completely dry. Do not bleach or dye the belts or use any other material to clean the belts because some of these agents can weaken the webbing.

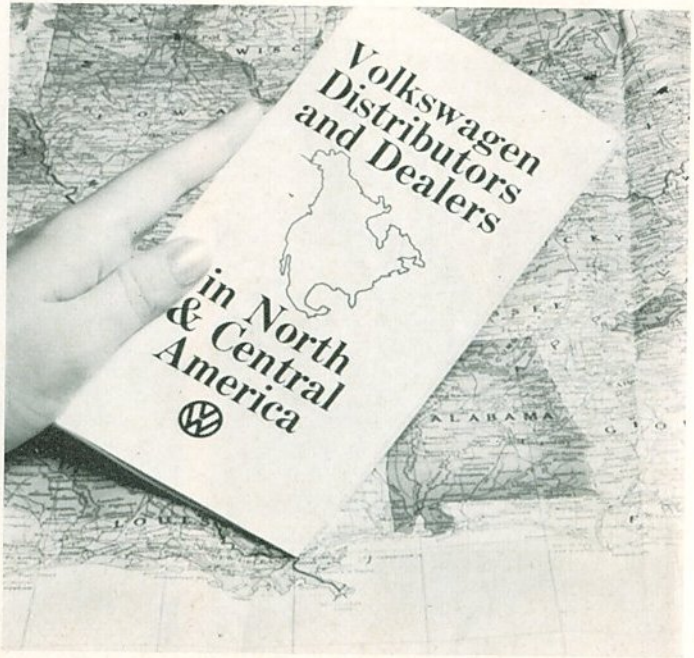
Check buckles and fittings periodically to make sure they function correctly and check belts to ensure that the webbing has not been damaged.

You can get Volkswagen's service only at an authorized VW Dealership. And that means just about everywhere.

Wherever you and your VW go, there is a Volkswagen Dealer close by. You'll find VW Dealers in every state of the U. S., every province of Canada and all the main cities of Central America. Plus more than 130 countries all over the world.

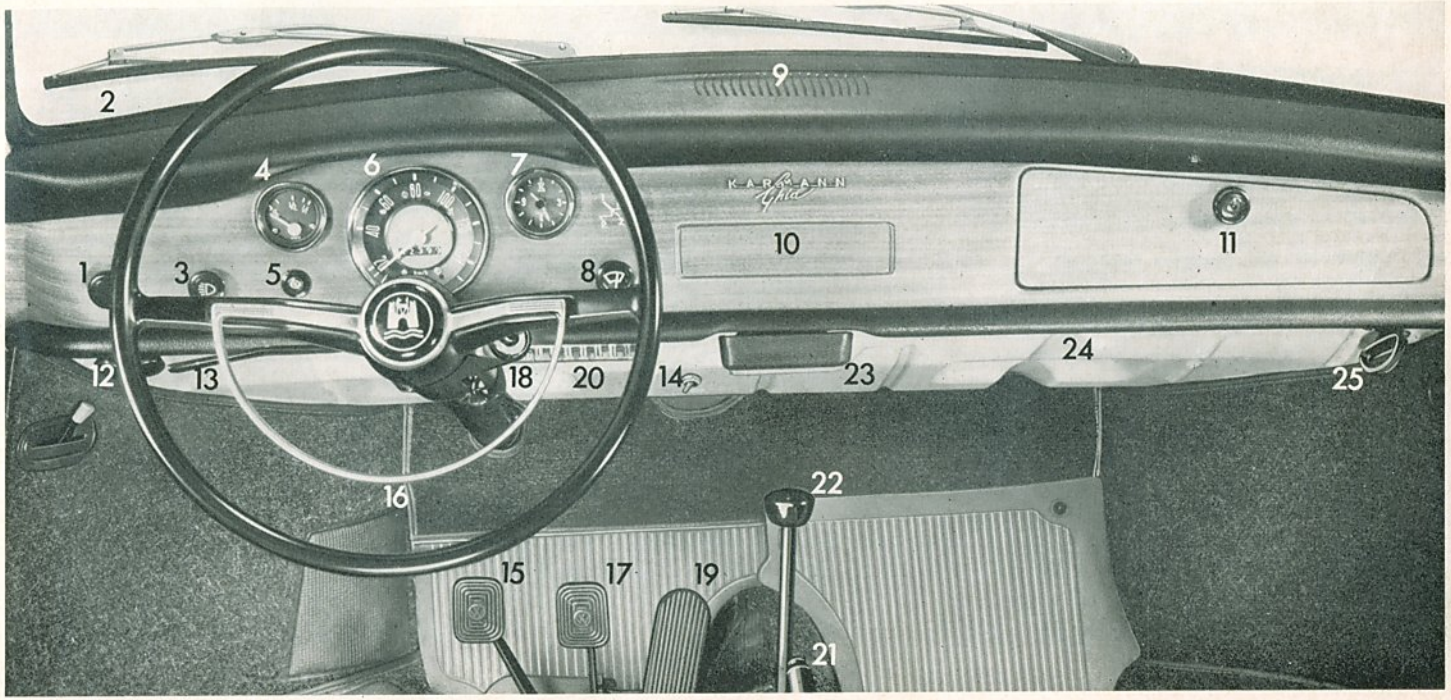
For your convenience, we can provide you with a booklet containing the names and addresses of all authorized VW Distributors and Dealers throughout North and Central America.

Just to make sure your VW is never far from home.

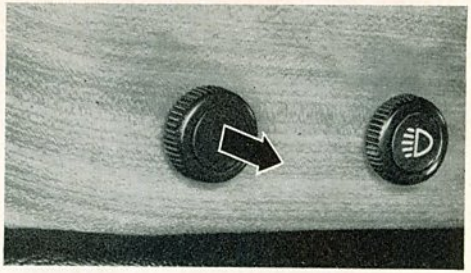


Instrument panel, hand and foot controls

Even if it is not your first Volkswagen Karmann Ghia, just have a quick look at the dash and try out the various knobs and levers with the ignition switched on:

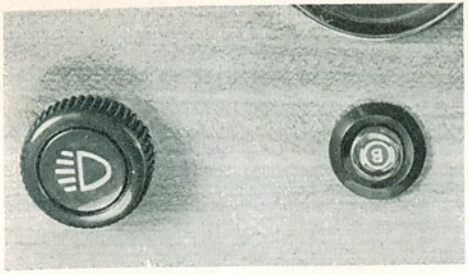


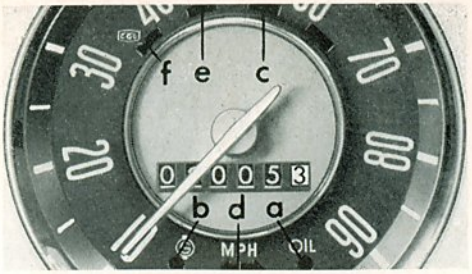
1 — Emergency flasher switch . . . . . (page 14)
2 — Defroster and fresh air vents . . . . . (page 19)
3 — Light switch . . . . . (page 15)
4 — Fuel gauge . . . . . (page 15)
5 — Dual circuit brake warning lights . . . . . (page 27)
6 — Speedometer with warning lights . . . . . (page 15)
7 — Clock . . . . . (page 15)
8 — Windshield wiper switch with knob for washer . . . . . (page 15)
9 — Loudspeaker grille
10 — Plate over radio aperture
11 — Glove compartment knob, lockable . . . . . (page 15)
12 — Fresh air control knobs . . . . . (page 19)
13 — Turn signal and dimmer switch lever . . . . . (page 16)
14 — Switch for rear window defogger . . . . . (page 16)
15 — Clutch pedal . . . . . (page 29/30)
16 — Horn ring
17 — Brake pedal . . . . . (page 16)
18 — Steering/ignition lock . . . . . (page 16)
19 — Accelerator pedal . . . . . (page 29/30)
20 — Fuse box . . . . . (page 16)
21 — Handbrake lever . . . . . (page 16)
22 — Gearshift lever . . . . . (page 16)
23 — Ashtray . . . . . (page 16)
24 — Padding for edge of instrument panel
25 — Release for fuel tank flap . . . . . (page 45)



1 — Emergency flasher switch

If the vehicle is disabled or parked under emergency conditions, pull the switch to make all four turn signals flash at once. A warning light in the switch knob flashes when the system is turned on.





3 — Light switch

Pull the knob to the first stop to switch on parking, license plate, tail and instrument lights. Pulling the knob all the way switches the headlights on.

The brightness of the instrument lights can be adjusted by turning the light switch knob.

4 — Fuel gauge

When the needle is on the "R" mark, there is about 1 gallon of fuel left in the tank — time to refuel at the next opportunity.

6 — Speedometer

Odometer with 1/10 mile indicator.

The following warning lamps are in the speedometer dial:

a — red	— oil pressure
b — red	— generator and cooling
c — blue	— headlamp high beam
d — green arrows	— turn signals
e — red	— ATF temperature Automatic Stick Shift
f — green	— rear window defogger

7 — Clock

The clock is electrically operated. The hands can be set by pressing in and turning the knob in the center of dial.

8 — Windshield wipers and washer

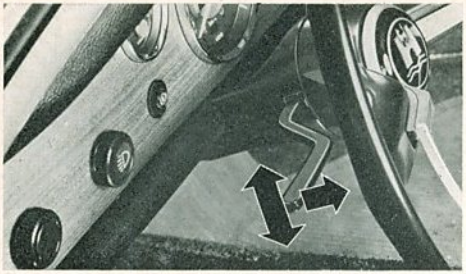
The two-speed-wipers are controlled by turning the wiper switch knob. The blades park automatically when turned off. Push button in the knob to spray fluid on windshield. Fluid will spray as long as button is held in.

11 — Glove compartment

To open turn knob to the left.

Inside the glove compartment is the release lever for the front hood.

For added protection, the glove compartment lid can be locked. This prevents access to the front luggage compartment and spare wheel.



13 — Turn signal and dimmer switch lever

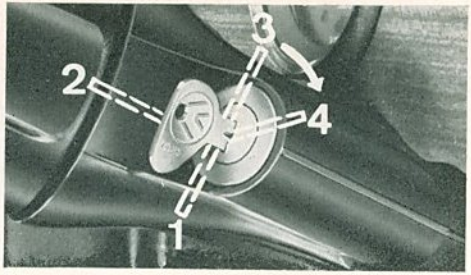
Lever up — right turn signals
Lever down — left turn signals

The turn signals are cancelled automatically upon completion of a turn.

Pull the lever toward steering wheel **to raise or lower headlight beams.** A blue warning light in the speedometer dial shows when high beam is switched on.

14 — Switch for rear window defogger

With the ignition switched on the rear window defogger is activated by this switch. The green control lamp in the speedometer dial will light up when the system is in operation. After the rear window has been cleared, swich off the rear window defogger to avoid an unnecessary drain on the battery.



18 — Steering/ignition lock

1 — Ignition off — steering locked — Key can be removed
2 — Ignition off — steering free
3 — Ignition on
4 — To start

Important

Remove key from lock only when vehicle is stationary.

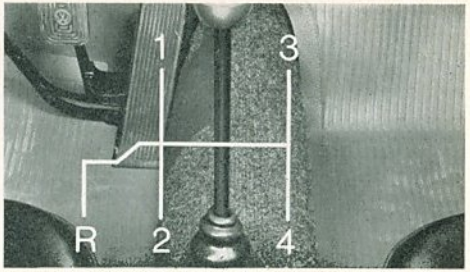
If key is left in steering/ignition lock at position 1, a buzzer will sound when the driver's door is opened.

Hint:

Should it be difficult to turn the key after inserting, gently move the steering wheel from side to side until key turns freely.

21 — Hand brake

Te release the hand brake, pull the lever and depress locking knob.



22 — Gearshift lever for manual transmission

(for Automatic Stick Shift see page 30)

Shift into reverse gear only when the vehicle is stationary. Reverse gear is fitted with a lock so that it cannot be engaged unintentionally. To engage reverse, press the lever down, move it over to the left and pull it back to the stop. When reverse gear is selected with the ignition switched on, the **back-up** lights come on automatically.

23 — Ashtray

Remove ashtray by pressing leaf spring and pulling ashtray out.

Interior trim

1 — Sun visors

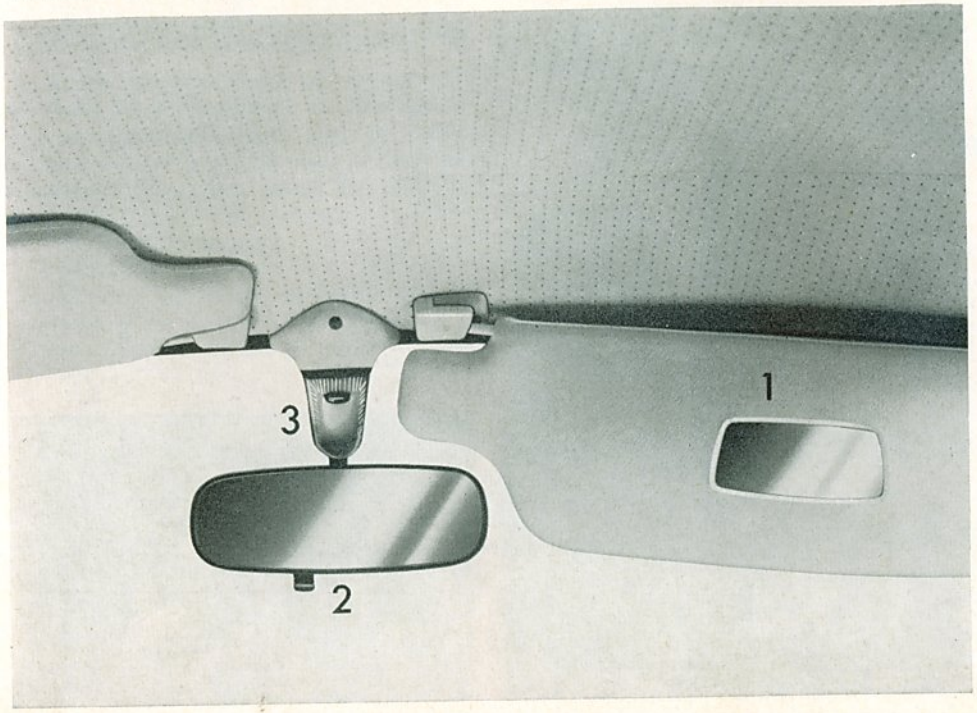
You can lift the visors out of the center mounting and swing them toward the door windows to prevent glare from the sides.

2 — Rear view mirrors

Outside and inside mirrors are adjustable so that they can be set to give clear vision to the rear at all times.

The outside mirror is hinged to fold flat upon contact.

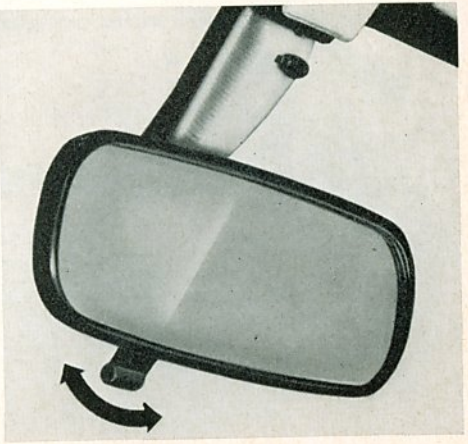
The inside rear view mirror is rimmed with plastic for safety and designed to detach upon impact. It is equipped with an anti-glare provision and can be adjusted at the lower portion of the mirror.



3 — Interior light

Switch positions:

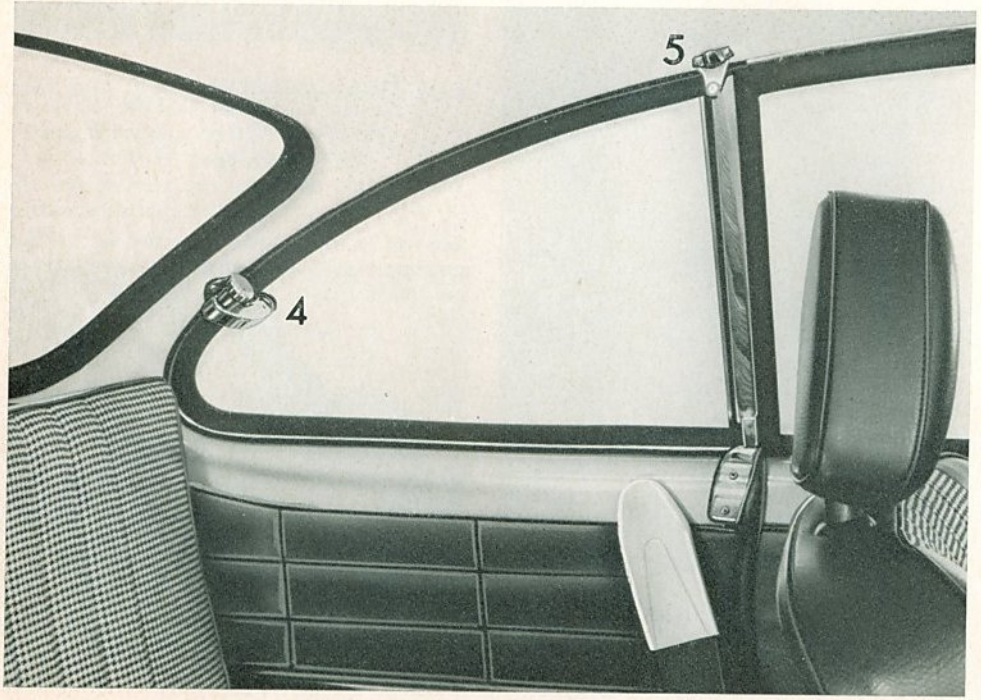
Right	—	Interior light on
Center	—	Interior light off
Left	—	Light only on when doors are open



4 — Hinged quarter window

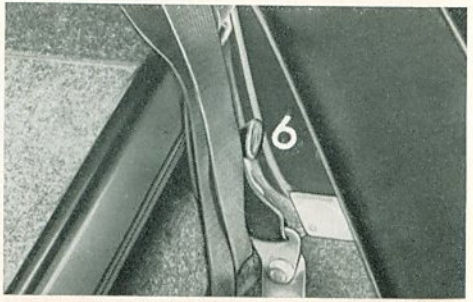
The windows can be opened as required after releasing the fastener. We recommend that you make full use of these windows, particularly under unfavorable weather conditions. They assure ventilation of the vehicle interior and, therefore, prevent the windows from fogging.

5 — Coat hooks

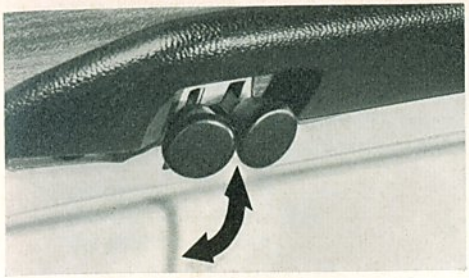


6 — Knob for engine compartement

The lid for the engine compartment is unlocked with the knob near the left door lock pillar. The lid is held in the open position by springs. To close the lid, press down on the license plate lamp housing until you hear a click.



Ventilation



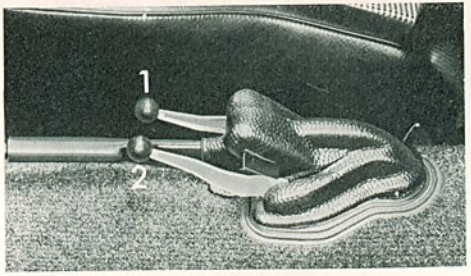
Fresh air control knobs

The two knobs on the lower edge of the instrument panel control the flow of fresh air separately for each side through the defroster vents at the bottom of the windshield.

Knobs to front — on
Knobs to rear — off

By operating the heating and the fresh air ventilation at the same time you can admit a mixture of warm and fresh air into the vehicle.

Heating



1 — Heating control lever

Lever up — heat on
Lever down — heat off

With the heating system switched on, warm air comes out of the 2 defroster vents at the lower edge of the windshield. Additionally on the Coupé, warm air is also distributed through the defroster vent at the lower edge of the rear window.

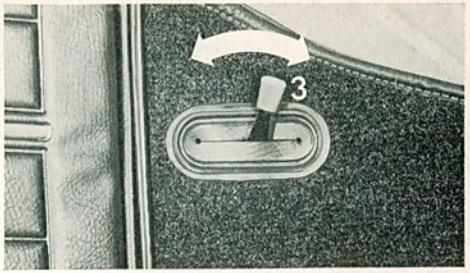
Hint:
The heating will be more effective if you open one of the rear windows slightly because the fan can then increase the warm air flow into the body interior.

2 — Control lever for heating in rear footwell

This lever controls the flow of warm air into the rear footwell when the heating is on.

Lever up — heat on
Lever down — heat off

At low temperatures it is advisable to leave the rear outlets closed when moving off. This increases the flow of air to the windshield and prevents it from steaming up when humidity is high. As soon as the windshield is clear, the rear footwell outlets should be opened so that the interior of the body heats up as quickly and uniformly as possible.



3 — Control lever for heating in front footwell

The flow of warm air into the front footwell can be controlled separately on each side

Push lever forward — heat on
Pull lever backward — heat off

Authorized VW Dealers use a new service system specially developed for the VW.

Lots of service stations say they can repair Volkswagen and a lot of them really can.

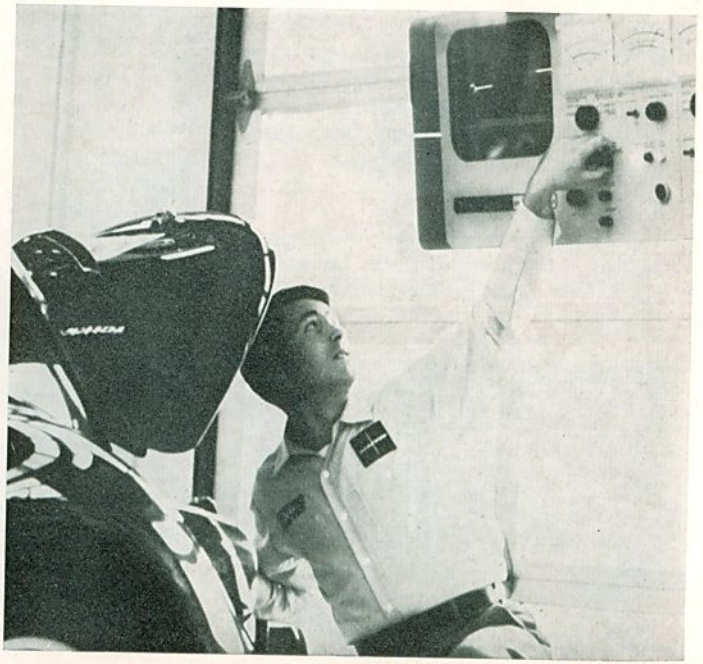
But they cannot offer you VW Diagnosis and Maintenance — our new service system.

Instead of giving every VW the same basic maintenance, we now treat each one as an individual.

This means your VW is thouroughly checked by a specially trained Diagnostician using special testing equipment. And that means your car gets just the maintenance it needs. No more, no less.

And **you** get a Test Report — so you know the exact condition of your VW.

It's something you should know about the car you drive.



VW Air Conditioner (US Optional)

Operating controls

1 — Air volume switch ("AIR")

A dual function is performed with this switch. Rotating the knob to the right turns on the air conditioning system, and the blower fan speed to 1 of 3 speeds. The blower fan positions are:

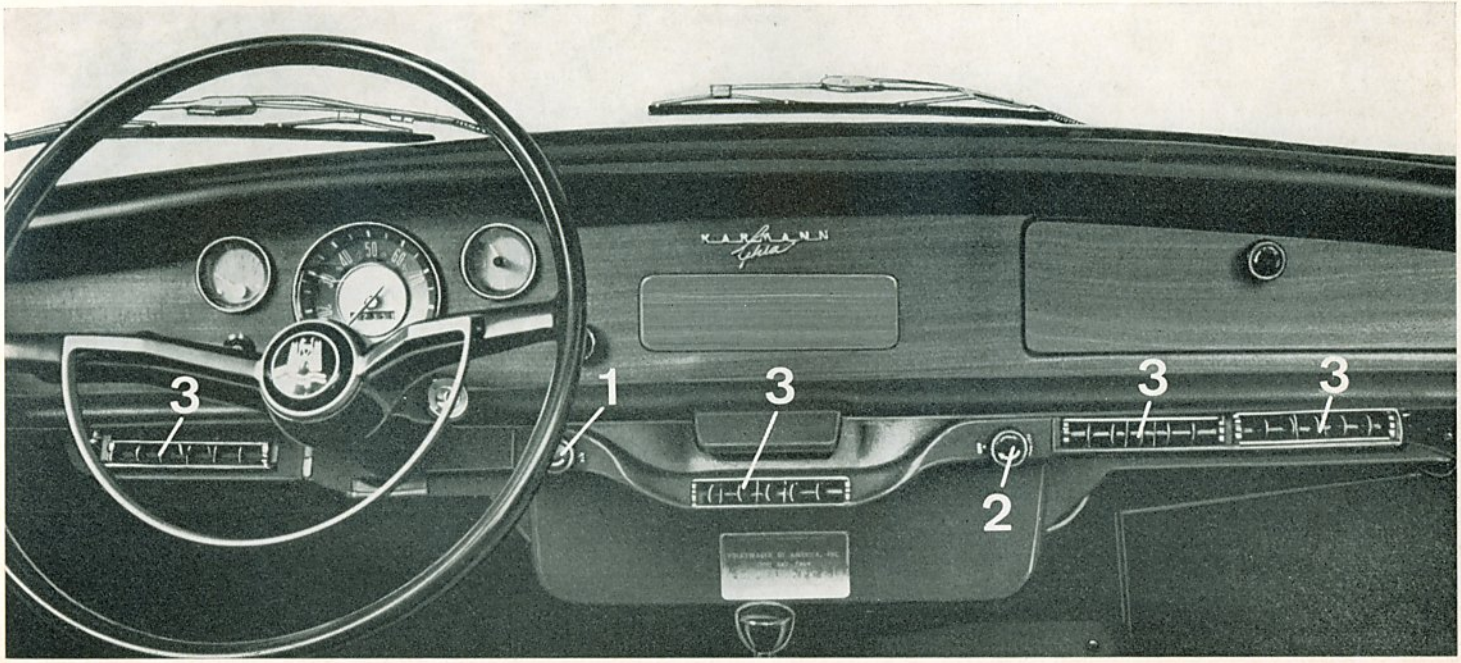
1st position — **HIGH**
2nd position — **MEDIUM**
3rd position — **LOW**

2 — Air temperature switch ("COLDER")

By progressively turning this switch to the right, the desired cooling range can be selected. It is in the coldest position when rotated as far as possible to the right.

3 — Air discharge louvers

These movable louvers can be adjusted to direct the conditioned air-flow up, down or sideways.



Starting the Air Conditioner

With the engine running, windows and fresh air regulator closed, turn the air temperature switch to the desired position and select the air volume speed desired. On extremely hot days turn the air volume switch to **"HIGH"** and open a window. Within a few minutes, the hot air will be forced out of the car and the window can be rolled up as cooling starts.

Adjust the air discharge louvers to the desired position.

Operational hints

If the volume of cold air suddenly decreases it is likely that the evaporator coil is "icing up". To remedy, turn the air temperature switch to the left and leave in this position until the air volume is back to its original rate.

If the car interior becomes too cold after adjusting the air volume, turn the air temperature switch to the left until the desired comfort level is reached.

In case the window exteriors fog over on warm, humid days, turn the air temperature switch to the left until they are cleared up.

If the window interiors should become fogged up during adverse weather conditions, they can be quickly cleared by switching on the air conditioner.

During highway driving, set the air temperature switch in approximately the middle position.

Stopping the Air Conditioner

Turning the air volume switch to the **"OFF"** position stops the entire air conditioning system.

When shutting off the engine, the air conditioner should also be turned off and not turned on again until the engine is running. This is to reduce the load on the electrical system and conserve the battery.

Maintenance hints

After the winter months and before prolonged summer usage, the air conditioner should be checked and, if necessary, serviced by an Authorized VW Dealer.

The condensers should be checked periodically for cleanliness. If the louvers are clogged, the condensers should be washed down with water. If, upon inspection, the condenser fins are bent, the car should be taken to an Authorized VW Dealer for straightening of the condenser fins.

Caution:

An air-conditioned Volkswagen should only be raised on a special lift available at any Authorized VW Dealer to prevent the possibility of damage to the vehicle and or air conditioner components.

Fuse replacement

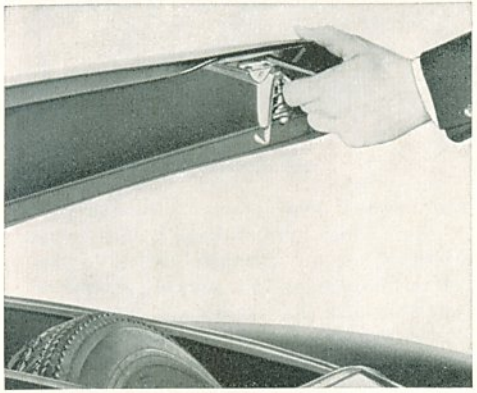
The fuse box is located in the front luggage compartment behind the instrument panel cover when an air conditioner is installed. This cover is readily removed by pulling it out of the slot.

The 8 Amp. fuse on the extreme right of the fuse box (as viewed) protects the air conditioning system.

A second fuse rated at 45 Amp. is contained in an in-line holder and is located near the battery in the engine compartment. It is connected directly to the battery.

Luggage compartments

Whether you are taking a lot of luggage with you or not, load the front luggage compartment first, using the heaviest pieces of luggage if possible. The correct distribution of load means the best road holding, so take advantage of the possibilities offered by the Volkswagen with its two luggage compartments.



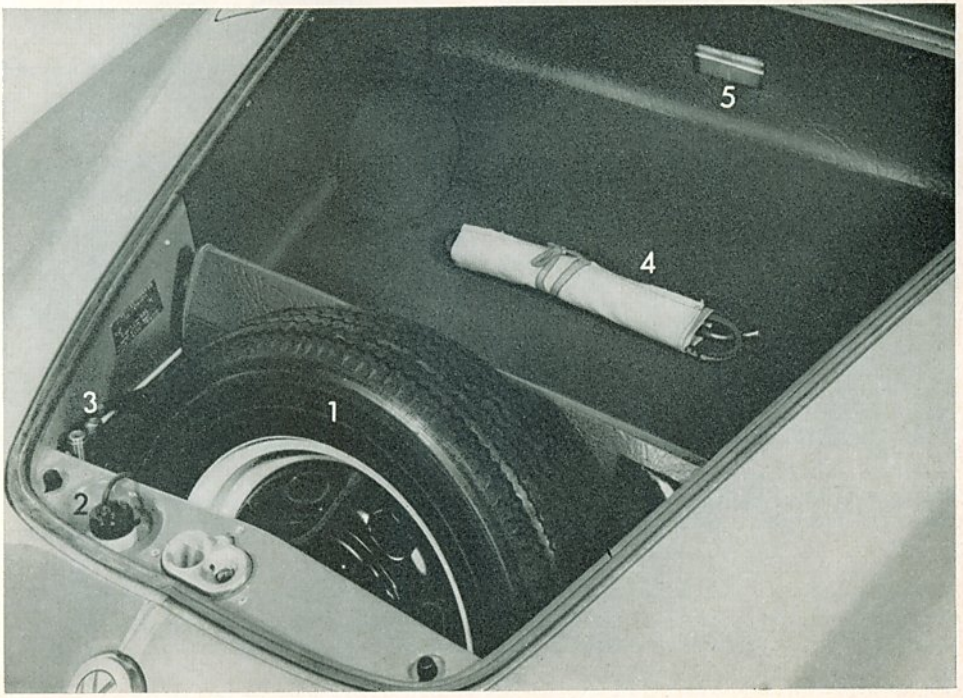
The front hood

is opened by pulling out the lever at the left in the glove compartment. The front hood opens partially and can be opened fully when the safety hook near the lock has been pressed up.

To close the hood, press it down firmly until you hear a click. Never try to close the hood by pressing at the side, always press it in the center near the lock.

1 — Spare wheel

It also serves at an air supply for the windshield washer container, therefore, the spare tire pressure should occasionally be checked and inflated to 43 psi. The air flow from the spare wheel to the washer container will be interrupted if the tire pressure ever falls below 26 psi. This is done automatically by means of the filler cap valve. As a result, the spare wheel will always have the required pressure should it be needed.



2 — Container for windshield washer fluid

As soon as the filler cap of the container is opened, the air supply from the spare tire to the windshield washer container is interrupted by means of a valve in the filler cap. The washer container can be filled completely with washer fluid. It is advisable to add a cleaning solution to the water, such as Volkswagen's Windshield Washer Anti-Freeze and Solvent, as clear water is usually not adequate for cleaning the windshield quickly and properly. If enough of this cleaning agent is put in, it also acts as an anti-freeze solution in the winter.

Follow the directions on the container for the amount to be used.

After filling washer container ensure that the filler cap is screwed on tightly.

3 — Jack

Operation of the jack is described, together, with wheel changing, on page 38.

4 — Tools

In the tool bag you will find

1 V belt of the size 9.1 or 9.5 x 900

1 hub cap remover

1 pair of combination pliers

1 screwdriver with reversible blade for slotted and Phillips screws

1 open-end wrench 8 mm and 13 mm

1 socket wrench for spark plugs, fan pulley nut and wheel bolts

1 socket wrench 13 mm

1 bar for socket wrench (also used to operate the jack)

5 — Brake fluid reservoir

The brake fluid level should always be above the protruding edge near the top of the container. If the brake fluid level ever falls below this edge, the complete brake system should be thoroughly examined by your Authorized VW Dealer.

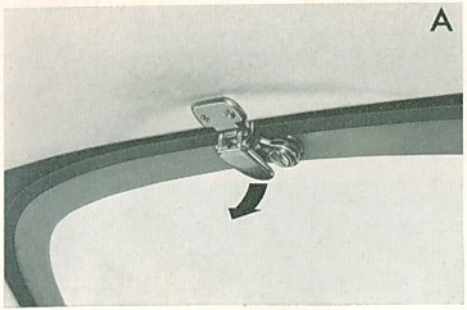
Brake fluid is water absorbent and should, therefore, be **renewed every 2 years.**

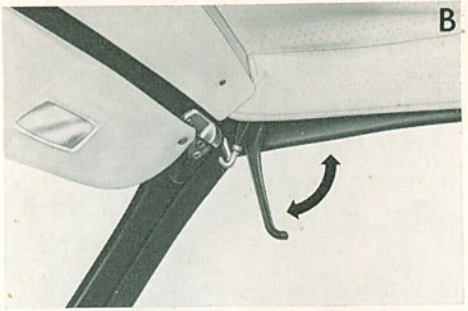
Rear luggage compartment

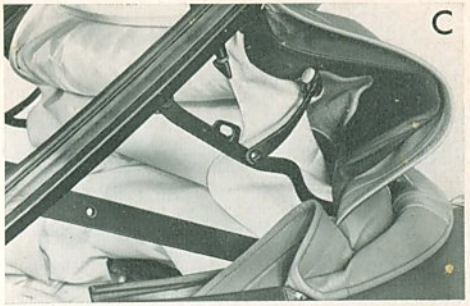
There is a second luggage compartment behind the jump seat. To stow luggage, just fold the backrest forward. You can leave the backrest in this position if you are in need of additional luggage space. In the normal upright position, the backrest is secured to the parcel shelf by a plastic retaining plate.

Convertible top

You can open the Convertible top with ease, but open it only when it is dry and clean because sharp particles of dirt will damage the material.

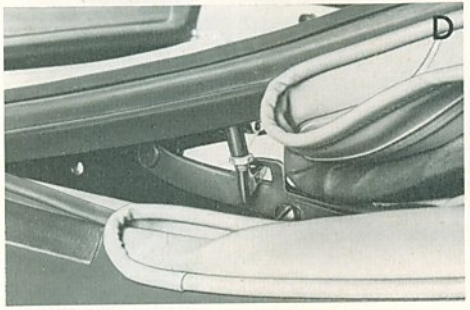


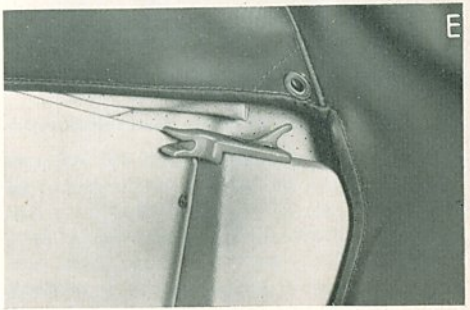




Opening the Convertible top

Always open the rear window first -A- and lower it until it rests on the rubber buffers **properly.** Remove pieces of luggage that may be in the way. Release the locking levers for the top above the windshield and disengage the hooks from the brackets on the windshield frame -B-. Fold the top back, ensuring that the headlining folds inward and the top and padding fold outward between the bows -C-. Press the top down until the catches engage -D-.





Lower the locking levers onto the top, then lay the protective cover over the top. Attach the protective cover first at the back by the press buttons on the vehicle body, then pull the cover toward the front over the top. Secure the protective cover with the other four press buttons near the doors and hook the two eyes in the cover over the projections on the jump seat backrest retainers -E-.

Closing the Convertible top

Take the protective cover off. Press the top down so that the catches can be unhooked. Pull the top forward as far as the windshield and lower the locking levers. From inside the car, pull the top down to the windshield frame with one hand and with the other hand guide the hooks into the holes of the brackets on the windshield frame. After the hooks have been engaged, tension the top by setting the locking levers. Finally, close and lock the rear window.

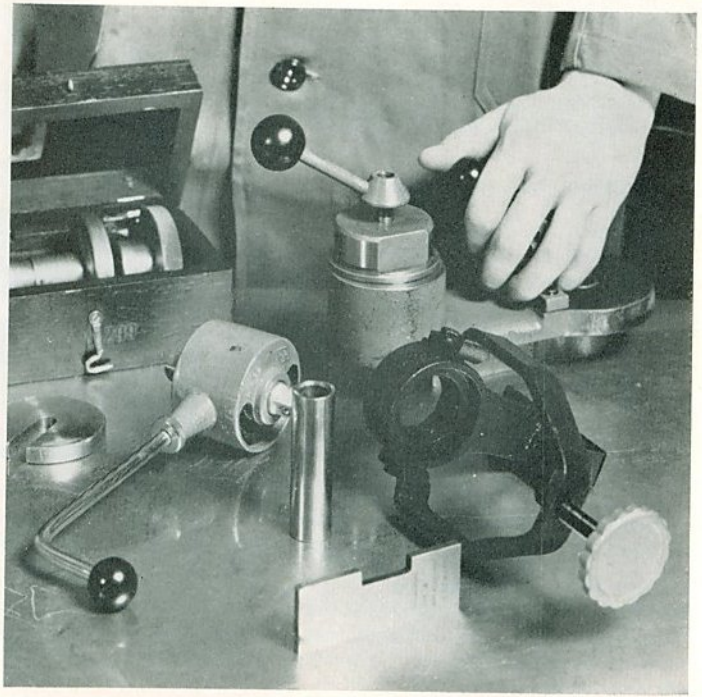
In any authorized VW dealer's service department, you get VW Specialists who know VW's intimately.

A VW Specialist works on VW's. Period.

Every so often he takes time off and gets a refresher course at one of our VW training centers.

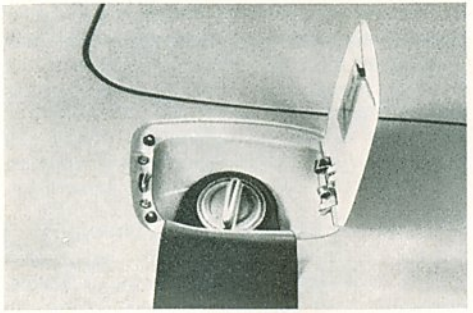
So he learns to fix Volkswagens before he starts working on your car. Rather than while he's working on your car.

We think it's better that way.



What to check

Bevor moving off, check the fuel, the brakes, the lights and, at regular intervals, the oil level in the engine and the tire inflation pressure.

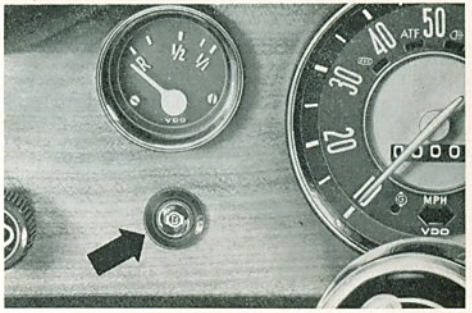


The fuel

in a full tank is sufficient for 250—280 miles. The filler neck is located behind a flap above the right front fender. The flap opens if you pull the release on the right hand side underneath the instrument panel.

The brakes

should be checked by applying the brake pedal just after moving off. Your Volkswagen is equipped with a dual brake system. Both systems, front and rear, can function independently.

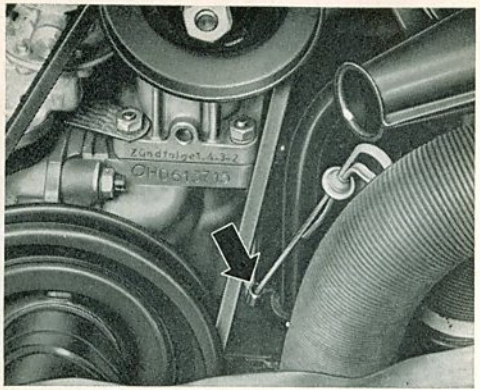


An indicator lamp on the instrument panel

monitors the brake systems. Should the indicator lamp light up while applying the brakes, see your Authorized VW Dealer as soon as possible because one of the two brake systems may have failed. The brakes will still operate however, a longer distance is required to bring the vehicle to a halt.

Push indicator lamp after switching the ignition on. If the lamp does not light up, the bulb should be replaced.

Please bear in mind that brakes are subject to wear. An increase in pedal travel will indicate this wear. Depending on individual operating conditions, the brakes may have to be adjusted between specified maintenance intervals.



The lights

include headlights, back-up lights, tail lights, license plate lights, turn signals and brake lights. The turn signals, brake lights and back-up lamps must be checked with the ignition on.

If a turn signal is defective, the warning lamp in the speedometer dial flashes much faster than usual or goes out. The brake lights only work when the brake pedal is depressed, the back-up lights only when reverse gear is engaged.

Two more important points:

1 — If the vehicle is used mainly under very dusty conditions, the oil bath air cleaner must be checked frequently, even daily if necessary. How this is done is described on page 56.

2 — Do not drive your car with a disconnected battery. On the other hand, both terminals must be taken off before quick-charging a battery in the vehicle. Failure to do this can lead to damage to the electronic components of the electrical equipment.

The oil level

should be between the two marks on the dipstick and must never be below the lower mark. Wipe the dipstick clean before checking.

The vehicle must be on a level surface when the oil level is checked so the dipstick reading will be accurate. Do not check the oil immediately after stopping the vehicle. Wait at least 5 minutes to give the oil in the engine time to drain down into the bottom of the crankcase.

To top up the oil, a well known brand should be selected. Although it is advisible to stick to one brand of oil, using a different brand to replenish the oil will not harm the engine. Details about the proper oil viscosities are given on page 50.

The correct tire pressure

is most important in the interest of safety. Too low as well as too high a tire pressure reduces the life expectancy of the tires and, furthermore, adversely affects the road holding of the vehicle. Although the tubeless tires of your car will hold the inflated tire pressure for a long time, you should check the pressure before you start out on a long trip or at least once a week.

The specified tire pressure can be found in the table on page 60 and also on the label inside the glove compartment lid.

Starting the engine

Before turning the ignition key, make sure that the gear shift lever is in Neutral. Vehicles with Automatic Stick Shift can be started in Neutral only.

At temperatures above freezing or when the engine is still warm, depress the accelerator pedal slowly while operating the starter. When the engine is very warm, depress pedal fully but do not "pump" it.

At temperatures below freezing or when engine is cold, depress the accelerator pedal once fully and then release it slowly so that the automatic choke can work. Switch ignition on and start **immediately.** When the weather is very cold, the engine may turn over slowly during starting. In this case depress the clutch while cranking; if it turns over faster, hold the clutch down until the engine starts. When starting without depressing the clutch, be sure the handbrake is on and the gearshift in Neutral.

As soon as the engine starts, release the ignition key so that the starter is switched off. Do not try to warm the engine up by letting it idle with the vehicle stationary — drive off immediately. Do not race the engine while it is cold.

If the engine does not start the first time or stalls when declutching, the ignition will have to be switched off and then on again. There is a non-repeat lock in the switch which prevents the starter from being operated when the engine is running and thus from being damaged.

The warning lights in the speedometer will come on when the ignition is switched on. As soon as the engine starts, these lights will go out. Stop at once if one of these lights comes on when driving:

Red warning light for generator and cooling:

Check the belt that drives the generator. If this belt breaks, the engine cooling fan also stops working. The proper way to fit a new belt is described on page 39.

If the generator stops charging for any other reason, you can drive on. But try to get the vehicle to an Authorized Volkswagen Dealer as soon as possible because the battery will soon run down.

Red warning light for oil pressure:

If this warning light comes on when driving the flow of lubricating oil in the engine may be interrupted. Check the oil level first. Should the cause of the trouble be elsewhere, contact your nearest Authorized Volkswagen Dealer.

Be careful when running the engine in enclosed areas. Ensure that there is ample ventilation so that the poisonous exhaust gases can escape.

Driving hints

You can drive your Volkswagen at full speed from the first day. There are, however, certain permissible speed ranges for the various gears:

1st gear: 0—15 mph
2nd gear: 10—35 mph
3rd gear: 20—55 mph
4th gear: 30 mph and up

When a particular traffic situation makes it essential to move rapidly, you can accelerate up to 37 mph in 2nd gear and up to 58 mph in 3rd gear for brief periods only. Bear in mind, however, that full throttle acceleration raises fuel consumption considerably. It is more economical to drive smoothly and keep the top speed fairly constant. Very fast, racy-sporty driving, alternating between full throttle and hard braking will mean more frequent visits to a gas station and increased tire and brake lining wear.

You can drive very economically between:

10 and 25 mph in 2nd gear

20 and 35 mph in 3rd gear

30 and 60 mph in 4th gear

Just a few words about the clutch while we are on the subject of driving. The clutch is a very hard-worked part of the vehicle. A good driver slips the clutch as little as possible when taking off and changing gears. He always depresses the clutch fully when shifting, changes down into the appropriate gear in city traffic instead of slipping the clutch, and never uses the clutch pedal as a "rest" for his left foot.

Volkswagen automobiles have excellent brakes. But do not forget that the braking distance increases very rapidly as the speed increases. At 60 mph for example, it is four times longer than at 30 mph. Apply the brakes in good time whenever possible, but do not use too much force — locked wheels increase the braking distance.

The friction value of the brake pads can be reduced if water reaches the brake discs during heavy rains for instance. Although the discs dry immediately, a lag in braking action may be noticeable after applying the brakes. Reduced traction of the tires during rain adds to this condition.

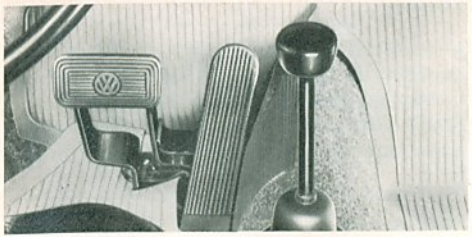
Therefore take care when driving and remain at a safe distance behind the preceding vehicle, particularly when roads are wet and slippery.

Always set the handbrake after parking your car. On steep hills turn the front wheels toward the curb.

That just about covers the operating of the car and how to drive it properly. From page 32 on you find the tips for winter driving, breakdowns and all there is worth knowing about the vehicle.

Before driving a vehicle with Automatic Stick Shift be sure to read the following pages:

VW Automatic Stick Shift



At first glance

you will notice the lack of a clutch pedal. Driving with the Automatic Stick Shift is simpler and shifting is easier. We suggest you carefully read the following instructions to familiarize yourself with the operation of the transmission.

The Automatic Stick Shift

transmission consists of a torque converter, a power-operated clutch for shifting, and a mechanical three speed transmission. The torque converter multiplies the torque produced by the engine and allows the vehicle to be driven with very little shifting — usualy two driving ranges will be used. It automatically changes the torque from the engine in an infinitely variable ratio according to driving conditions. Since the torque converter is a fluid coupling, it also permits the vehicle to be stopped with an engaged gear while the engine is running. The clutch interrupts the flow of power from the engine to permit the gears in the transmission to be shifted. Because the power-operated clutch is actuated by the first slight movement of the gearshift lever, there is no need for a clutch pedal.

Driving ranges

Your Automatic Stick Shift has three forward driving ranges and one reverse. They have been designed so that you will very quickly know which range to use to produce the best performance under all driving conditions.

Neutral

is between all gears in the H-pattern. Neutral is the only range that completely interrupts the flow of power to the rear wheels. It should be used when the car is standing at idle for any lenght of time, with the hand brake set. Neutral is also the only range in which the engine may be started.

Starting

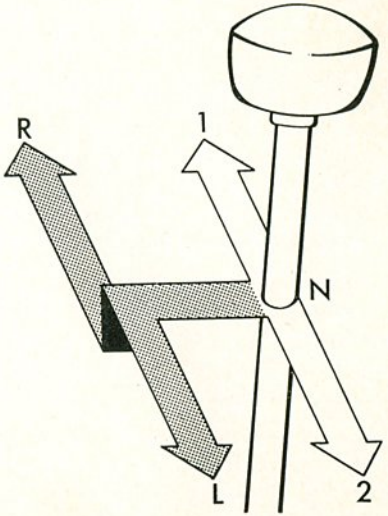
With the hand brake set, move the shift lever to Neutral and start the engine. Move the shift lever into the range you wish to use, normally Range 1, and then release the hand brake. It is important to release the brake after shifting because, under certain conditions, the vehicle may creep when a driving range is selected. After shifting, be sure to remove your hand from the gearshift lever to allow the clutch to engage.

Low range

or the load range is not normally used in day to day driving. It is only used to get the car moving on steep slopes with a full load or when driving down a very steep hill to take advantage of the additional engine braking. Low is also recommended for particularly slow driving over rough ground. Speeds from 0—35 mph can be obtained in this range.

Driving Range 1

is for starting off and accelerating, and covers the speed range from 0—55 mph. Under normal driving conditions, the vehicle is started in this range before shifting to Range 2. Range 1 is also recommended for use in city traffic. slow moving lines of vehicles and whenever maximum acceleration is required for passing. If the vehicle is in Range 2, you may downshift into Range 1 at any speed under 55 mph.



Driving Range 2

is the range that should normally be used for highway driving. While this range may be used at any speed from 0—top speed, it is the only range that can be used above 55 mph. At low speeds, however it is better to use Range 1 to take advantage of its better acceleration.

The Reverse Range

should only be engaged when the vehicle is stationary. The gearshift lever must be depressed to get past the saftey stop to shift into Reverse.

Shifting

is easy. Simply release the accelerator pedal and move the gearshift lever from the range you are in to the range you want, remove your hand from the gearshift lever, and again step on the accelerator.

If you like quiet, smooth driving,

which saves fuel, we recommend that you shift to Range 2 soon after starting off at about 20 to 25 mph.

If you want to drive fast

and want maximum acceleration, you can stay in Range 1 right up to 55 mph and then shift into Range 2. Naturally, this will use more fuel.

Driving downhill

If you make full use of the braking power of the engine, just select a lower driving range as with a conventional transmission. When parking in tight spaces, it is advisable to use the driving ranges Reverse and Low. Shift into Reverse only when the vehicle is stopped.

Warning light in speedometer

There is a red warning light in the upper half of the speedometer dial (see page 14). If the light ever goes on, it indicates that the ATF (Automatic Transmission Fluid) has reached too high a temperature. If you drive for a longer time under heavy load conditions, such as when pulling a trailer up a hill, and the warning light goes on, shift to lower driving range. However, if the car is loaded so heavily that it barely moves or does not move at all, shift to a lower gear immediately without waiting for the warning light to go on.

Stopping

Release the accelerator and apply the foot brake. If you are going to start off again in another range, you may shift into the new range while the vehicle is standing still, but if you remain in a driving range, apply the foot or hand brake to prevent the vehicle from creeping.

Towing

It is possible to tow a trailer with the Automatic Stick Shift. However, it is better to start in the Low driving range with this extra load. When driving up and down steep hills, shift to a low range early.

Push starting

If the engine should ever fail to start, the Low driving range should be used in such instances and the vehicle moved at a minimum speed of 15 mph.

For further hints about towing and pushing see page 47.

Some basic rules

1. When parking, apply the hand brake.
2. When idling for an extended period of time, shift into Neutral and apply the hand brake. When stopped in traffic, apply either the hand or foot brake to prevent creeping.
3. When starting out, shift into a driving range before releasing the hand brake.
4. After shifting, remove your hand from the gearshift lever. Do not try to drive with your hand resting on the lever.

An 8 Amp. fuse in a fuse holder above the ignition coil protects the control valve of the Automatic Stick Shift. If this fuse should ever burn out, the transmission cannot be shifted.

Winter operation

Your car has two features which you will appreciate in the winter: Air cooling and heating. You can leave your car out in the bitter cold without fear — the aircooled engine will always start readily and supply warm air for the interior of the body.

Do not, under any circumstances, try to influence the heating of the vehicle by covering up the slots in the engine compartment lid. These slots must always be clear so that air can flow into carburetor and to the engine cooling fan.

Tires with badly worn treads are very dangerous, particularly in the winter. Make sure they are replaced in time. Winter tires do not fulfil their purpose if the tread depth is less than 5/32" (4 mm).

Winter tires with special heavy treads give good traction in snow and slush. Better still are winter tires with studs which increase the safety margin even on hard snow and ice. Winter tires should always be fitted on all four wheels. Check your state laws before using studded tires.

If winter tires are mounted, they should have the same load capacity as tires of the original equipment.

The specific characteristics of winter tires can be improved by raising the tire pressures to 3 psi above the normal operating pressure for the tire concerned. This inflation pressure than covers the recommended pressure increase of 3 psi for fast highway driving. Winter tires with studs should be run at moderate speeds when new in order to give the studs time to settle.

In general, winter tires only have real advantages when conditions on the road are really wintry.

For safety reasons, it is not advisable to drive a vehicle fitted with any type of winter tire at top speed. You cannot expect a winter tire to have the same degree of traction on dry, wet or snow-free roads as a normal tire. Furthermore, winter tires wear rapidly under these conditions particularly at high speeds.

Radial play tires are suitable all year round. If winter conditions are not too severe, they may very well replace conventional snow tires.
Even more suitable for operation of the vehicle during the winter season are radial ply winter tires and tires with studs. An increased tire pressure of 3 psi (0.2 kg/cm) applies to these tires also.

Snow chains

Only thin chains which do not stand clear of the tire tread and inner side wall more than ½ inch including tensioner, are suitable.

While winter tires should be used on all four wheels, chains are required on the rear wheels only.

When driving over long stretches of road which are free of snow, the chains should be removed because they serve no useful purpose and merely damage the tires and wear out quickly.

Engine oil of SAE 30 grade will tend to thicken at temperatures around freezing and may cause difficult starting. As soon as winter temperatures are expected, change to a thinner grade of engine oil. Details of the various oils to be used are given on page 50.

If you drive mostly short distances and in city traffic, especially in the winter, we recommend that you have the engine oil changed at shorter intervals, say every 1500 miles. At other times, these additional changes are unnecessary and uneconomical.

In areas with artic climate and temperatures below —15° F, the engine oil should be changed every 750 miles.

Transmission oil of SAE 90 grade can generally be used all year round. Only in areas with cold climate is it necessary to use thinner SAE 80 transmission oil.

In areas with arctic climate and temperatures below —13° F, ATF (Automatic Transmission Fluid) can be filled into the transmission and final drive. As soon as the temperature rises, this fluid must be replaced by SAE 80 or SAE 90 transmission oil.

The battery not only tends to drop in capacity as the temperature drops, it also has to work much harder in the cold weather. Apart from the higher current consumption when starting and using the lights more often, there are numerous other electrical items used mainly in winter, such as rear window defogger and auxiliary heater.

A really cold battery which may not be fully charged has only a fraction of the capacity that a battery at normal temperature has, and this might not be enough to start a cold engine. If the car is only driven short distances and in city traffic, the battery may have to be charged from an external source from time to time. For more details see page 46.

The spark plugs should not have excessively large gaps especially in the winter. The gap is normally .028 in., but when the weather is very cold, the gap can be temporarily reduced to .020 in. to facilitate starting.

Door locks can freeze in winter if water gets into the lock. When washing the vehicle, do not aim the water jet directly at the locks. It is a good idea to cover the keyholes beforehand. A frozen lock can be opened by heating the key before inserting it. An anti-freeze solution or glycerine should then be squirted into the lock cylinder as soon as possible.

It is a good idea to carry a shovel or a short-handled spade in the car to clear away snow if you get stuck. A small hand brush for sweeping snow off the vehicle and a plastic scraper for the windshield are also useful.

Care of Car

We have provided your vehicle with enamel which is not only extremely durable and has a very high gloss, but which also has a long service life. This has been achieved by special chemical treatment of the body metal and the use of a synthetic resin enamel paint technique.

But even the finest paint requires a certain amount of care. This is easy to appreciate if you consider for a moment the influences to which the paint is exposed. Sunlight, rain, industrial fumes, soot, dirt and dust are constantly attacking the paintwork.

In the winter, all parts o fthe vehicle are subjected to even more severe climatic conditions and corrosive salt solutions. It is advisable to clean and wax the vehicle more often at this time of the year.

The items listed below will help you preserve the built-in beauty of your Volkswagen. Compounded especially for use on your VW, they are available at your local Authorized Volkswagen Dealer. Detailed instructions on how to use the various products are imprinted on the individual containers.

Application	Volkswagen Product
Car Washing, Convertible Top Cleaning, Upholstery Cleaning, Whitewall Tire Cleaning	All Purpose Cleaner — ZVW 243 101
Paint Polishing and Paint Waxing	Combination Car Cleaner and Wax — ZVW 241 109
Paint Polishing	Paint Polish — 000 096 001
Paint Waxing	Classic Car Wax — ZVW 246 101
Care and Cleaning of Chrome Parts	Chrome Cleaner and Protection — 000 096 061
Windshield Cleaning	Windshield Washer Anti-Freeze & Solvent — ZVW 241 101
Paint Touch up	Touch up Paint, all colors

Washing

In the first two months:

Wash vehicle frequently with clear water but do not wash it in direct sunshine.

Rinse sponge often to avoid scratching the paintwork.

Later on:

Wash vehicle whenever it is dirty.

If the dirt cannot be removed with clear water, All Purpose Cleaner or a suitable shampoo can be added to the water. Afterward, rinse all traces of the cleaner off with clear water and then wipe the vehicle dry to avoid water spots.

Waxing

Wax for first time after 8—10 weeks.

The paint should be re-waxed when water remains in large patches on the surface and does not form beads and roll off.

Polishing

Should only be done if paint has lost shine and gloss cannot be brought back with wax. After treatment with polish the vehicle must be waxed.

If paint is cleaned with Combination Car Cleaner and Wax it need not be waxed afterwards.

Paint touch up

Minor paint damages, such as scratches, stone chips and the like, can easily be touched up with a paint stick available at your Authorized VW Dealer.

In the spare wheel compartment you will find a sticker beside the vehicle identification plate showing a number. This is the code number for the paint color of the vehicle.

Removing tar spots

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

Removing insects

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

Parking under trees

Vehicles which are parked under certain trees during 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

Chrome parts should be treated with a chrome cleaner or polish. To give lasting protection in the winter, the chrome parts can be coated with Volkswagen's Chrome Cleaner and Protection.

Cleaning windows

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

These streaks can only be removed with a good windshield cleaner. Do not forget to clean the wiper blades.

Windshield wiper blades

The blades should be taken off from time to time and cleaned with a hard brush and alcohol or a strong detergent solution. During long dry periods they tend to get clogged with tar splashes, oil and insects. New blades should be fitted as often as necessary.

Door and window weatherstrips

Weatherstrips must be undamaged und supple to ensure that they seal properly. To retain the original flexibility of the rubber, coat the weatherstrips with talcum powder or silicone spray occasionally.

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.

Cleaning cloth upholstery

The cloth upholstery should be cleaned with a vacuum cleaner or a fairly hard brush. Spots can usually be removed with a lukewarm soap solution. Grease and oil spots can be treated with spot remover. Do not pour the liquid on the material as this will leave marks. Dampen a clean, plain cloth with the cleaner and remove the spot by rubbing with a circular motion and working inwards.

Cleaning leatherette

The leatherette parts of the headlining, side trim panels and seats can be cleaned best with a soft cloth or brush. When very dirty use Volkswagen's All Purpose Cleaner. Use only a dry foam cleaner on the leatherette of the seats and backrests because the material used for these parts is air-permeable and liquid cleaners would penetrate into the textile backing.

Grease or paint spots should be wiped off, when possible, before they dry. Once dry, they can be removed by rubbing carefully with a cloth moistened with benzine or alcohol. Shoe polish marks can be removed with turpentine but be careful because this will damage the dust repellent surface of the leatherette if applied too long. After cleaning, rub the material dry with a soft cloth. So-called preservatives are not suitable for leatherette because they do not soak into the material and merely collect dust and that will soil your clothing.

The front seats

If the front seats become hard to slide, the runners should be lubed lightly at top and bottom after being cleaned with a cloth. After unhooking the coil spring underneath the seats they can be moved forward out of the runners. When putting the seat back, do not forget to hook the coil spring in again.

Convertible top

The top does not require any special care. It is important however, to clean the plastic material regularly. When very dirty, the top can be cleaned with a soap powder solution or Volkswagen's All Purpose Cleaner. A hard brush will help to remove dirt from the grained surface of the material but care must be taken at the edges to avoid scratching the paint with the bristles. After washing the top, the complete vehicle must be rinsed thoroughly with clear water.

Spots in the top material must never be removed with paint thinner, chlorine-based spot removers or similar solutions, as this will damage the material. Stubborn spots can be removed by wiping with a cloth moistened with benzine and then rinsing well with a lukewarm soap solution.

The pivot points of the top linkage should be cleaned occassionally and a few drops of oil applied. Afterward the joints should be wiped dry to ensure 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 silicone spray.

Tires

In addition to checking pressures regularly and driving carefully, the following points should be remembered in connection with tires:

1 — Check tires for damage frequently and remove imbedded material.

2 — Keep oil and gasoline away from the tires.

3 — Try not to expose tires to sunshine for long periods.

4 — Replace missing valve dust caps as soon as possible.

The original equipement tires on your Volkswagen are provided with built-in tread wear indicators to assist you in determining when your tires have been worn to the point of needing replacement. These indicators are molded into the bottom of the tread grooves and will appear as approximately $^1/_2$-inch wide bands when the tire tread depth becomes $^1/_{16}$ of an inch. When the indicators appear in two or more adjacent grooves, tire replacement due to tread wear is recommended.

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. If you notice that the tires are wearing unevenly, get advice from your Authorized VW Dealer.

Tread still good

Tread worn out

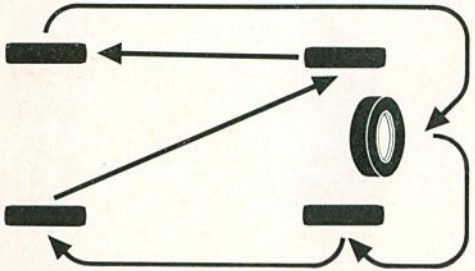
Do-it-yourself tips

Just in case you have to carry out a repair yourself we have included some information on the next few pages which should help you.

All other repairs should always be performed by an Authorized VW Dealer. The Volkswagen service organization offers you a widespread network of authorized dealers staffed by skilled mechanics and equipped with all the special tools and appliances required. Whenever you see the familiar VW sign on the roadside, you can be sure of expert advice and quick, efficient assistance.

Rotating wheels

Equalize uneven tire wear by rotating the five wheels as shown in the sketch. However, it is advisible to keep the tires with the best treads on the front wheels. Tighten the wheel bolts diagonally to 110 ft. lbs. and correct the tire pressures.



Changing wheels

Before taking out the spare wheel, disconnect the hose leading to the valve of the spare wheel.

Apply the hand brake and block the opposite wheel.

Take off hub cap with remover and jack bar by hooking the remover into the holes in the edge of the cap and levering against the wheel rim with the jack bar.

Loosen all wheel bolts about one turn with socket wrench and bar.

Insert jack into square hole under body and push the jack tube down until it touches the ground.

Place bar in **upper link -A-** of jack and **raise** vehicle by pumping handle up and down.

Note:

The jack is a tool for changing a wheel only. If you work under the car, place a suitable support under car frame.

Unscrew wheel bolts and take wheel off.

Place spare wheel in position and raise or lower vehicle as necessary until a hole in the wheel is roughly in line with a threaded hole. Insert the bolt and tighten only so far that the wheel can be swung round to align the other holes.

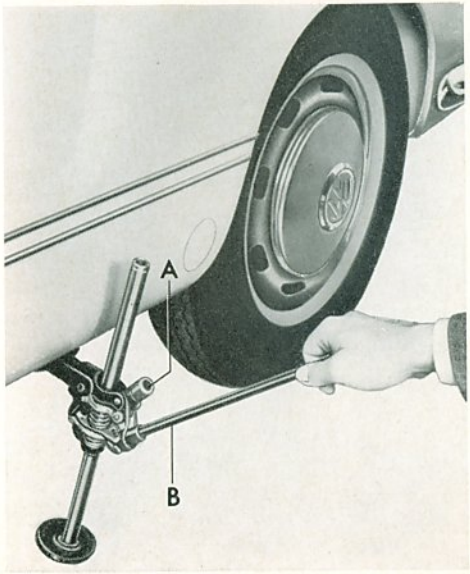
Insert remaining bolts.

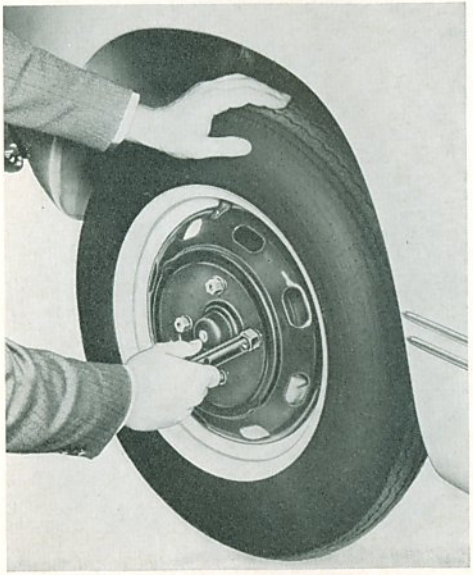
Tighten bolts until the wheel, centered by the spherical shape of the bolt heads, contacts evenly all round.

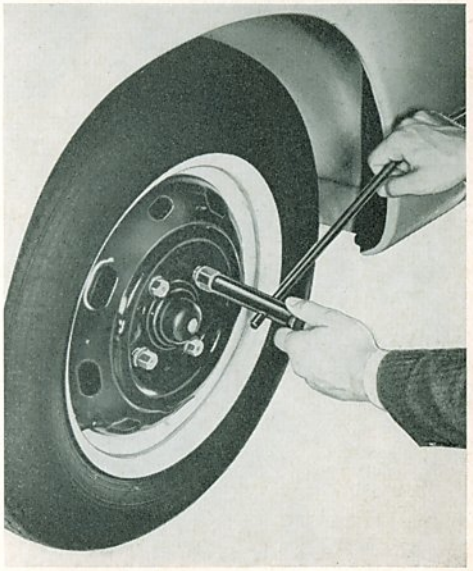
Place bar in **lower link -B-** of jack and **lower** the vehicle by pumping handle up and down.

Insert bar into wrench and tighten the wheel bolts diagonally to 110 ft. lbs. Have it checked at a service station with a torque wrench because correct tightness of the wheel bolts is important for safety.

Install hub cap with a blow of the hand. Be sure to check the pressure in the tire you have just put on. For correct tire pressure see page 60.



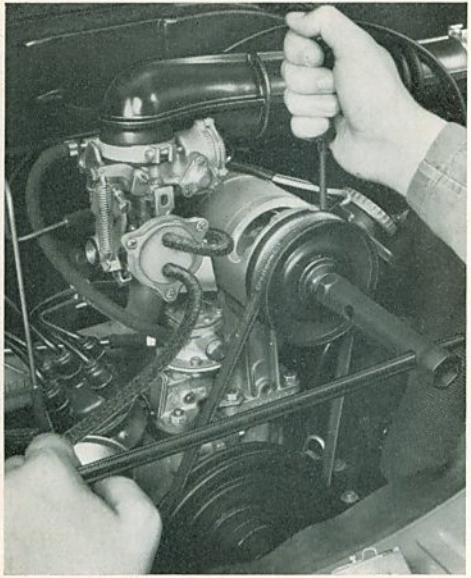


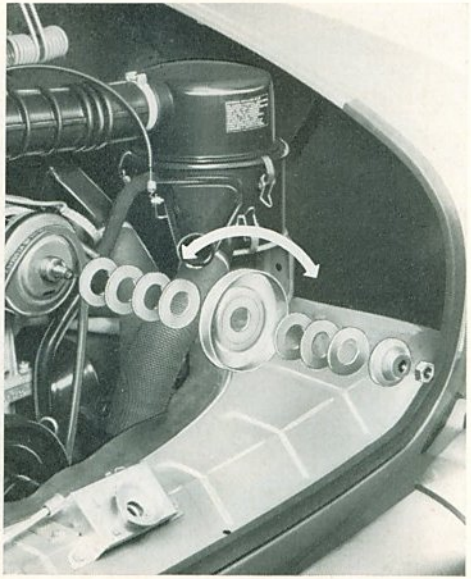


Adjusting or replacing V belt

To adjust the belt, remove the rear part of the pulley on the generator. When loosening and tightening the nut, place a screwdriver in the slot in the front half of pulley and support the screwdriver against the upper screw in the generator housing. To fit a new belt, the cover plate for the crankshaft pulley must also be removed after taking out the three screws.

The belt tension is adjusted by varying the number of washers between the pulley halves. Taking washers out increases the tension putting them in decreases it. Extra washers are stored on the outside of the pulley half.





The V belt tension is correct when the belt can be pressed inward about .6 in. at the center. The belt must not be too tight or too slack. A new belt may stretch slightly at first. It should be checked after about 600 miles and the tension corrected if necessary.

Hint:

Although the life expectancy of the V belt of your VW is very high, you should always carry a replacement belt in the car.

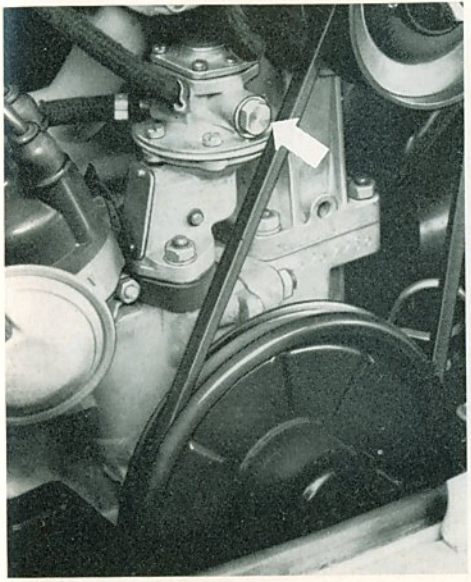
Cleaning fuel pump filter

Remove plug and take filter out.

Reinstall plug immediately to prevent fuel leakage.

Wash filter in clean benzine and blow it out.

When installing the filter, ensure that the washer for the plug is located properly.



Cleaning or replacing spark plugs

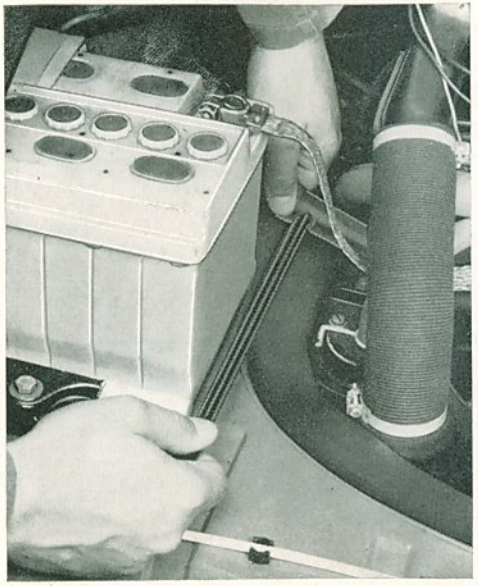
Pull connector off.

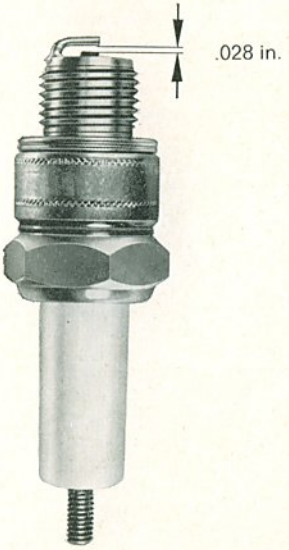
Remove plug with socket wrench and bar.

Dirty plugs should be cleaned with a sand blaster but in an emergency, the carbon can be removed with a wood chip. Do not use a wire brush. The plugs should also be clean and dry on the outside as well in order to avoid shorting and tracking. The gap can be set by bending the outside electrode. The gap should normally be .028 in., but when the weather is very cold it can be reduced temporarily to .020 in. to facilitate starting.

Take care not to crossthread the plugs when inserting them, and tighten them firmly, but do not overtighten.

New plugs should be fitted every 12 000 miles.





Adjusting headlights

It is best to check the headlight alignment with a regulation screen or aiming device. If none is available, proceed as follows:

Check tire pressures, correct if necessary and park vehicle on level surface squarely facing a wall or screen 25 feet in front of the headlights.

The driver's seat must be loaded with one person or a weight of 154 lbs.

Measure height (a) from ground to center of headlights and draw a horizontal line (H) on screen at this height the full width of the vehicle.

Opposite the center of each headlight, draw vertical lines (V) intersecting the horizontal. These lines should be 48.8 in. apart. Drawing a vertical line for the center of the vehicle might help aligning vehicle with screen.

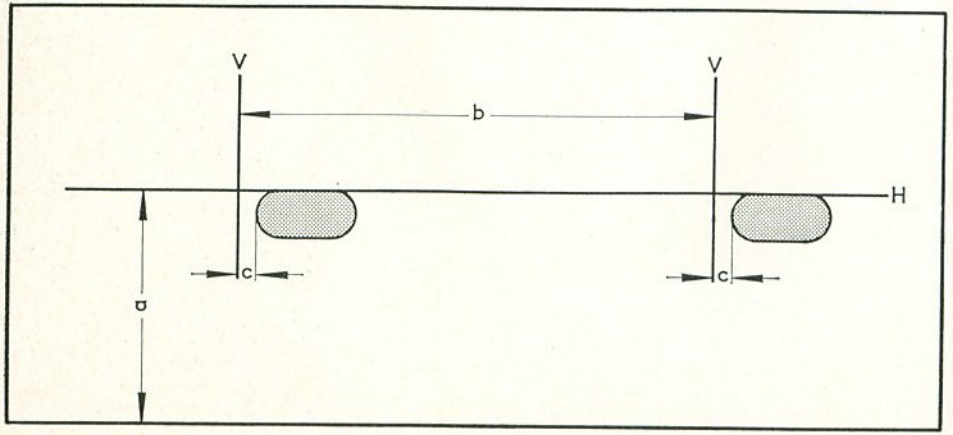
Loosen the screw in the center below the headlight and take the trim ring off.

Aim the headlights individually by turning the two aiming screws with low beams switched on. Cover up the second headlight.

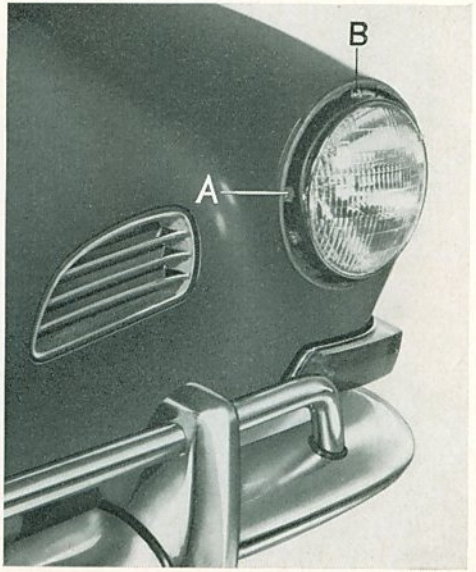
The headlights are correctly aimed when the top edge of the high intensity zone is on the horizontal line H and the left edge is 2 in. to the right of the vertical line V.

Check with your State Bureau of Motor Vehicles for variations from these specifications.

a = Height of headlamp center from floor
b = Distance between headlamps (48.8 in.)
c = 2 in.



A — Lateral aim
B — Vertical aim



Bulb chart

	U. S. Replacement bulbs	VW Part. No
Sealed beam (headlights)	6012	111 941 261 A
Front turn signals / parking lights	1034	N 17 738 2
Side marker light	57	N 17 717 2
Rear turn signals	1073	N 17 732 2
Stop / tail lights	1034	N 17 738 2
Back-up lights	1073	N 17 732 2
License plate lights	67	N 17 718 2
Instrument and warning lights	—	N 17 751 2
Interior light	—	N 17 725 2

Replacing bulbs

Headlights

A double filament, type 2, seven inch Sealed beam unit of domestic manufacture is used in your Volkswagen. Should it become necessary to replace the unit, loosen screw in the center below the headlight and take off the trim ring.

Remove three screws in Sealed beam retaining ring and take ring off.

Take Sealed beam unit out of support ring and pull off cable connector.

When installing new Sealed beam unit, ensure that the three glass lugs engage properly in the supporting ring.

Check headlight settings.

Front turn signal / parking light blub and side marker light bulb

Loosen two Phillips screws and take off lens.

Press bulb into holder lightly, turn and take out.

Install new bulb.

When fitting lens, ensure that gasket is located properly.

Rear turn signal, stop and tail light, back-up light bulbs

Unscrew two Phillips screws and remove lens.

Bulb positions:
Top — turn signal
Center — stop and tail light
Bottom — back-up light

Press bulb lightly into holder, turn and take out.

Install new bulb.

When fitting lens, ensure that gasket is located properly. Tighten lens securing screws evenly but do not novertighten.

License plate light bulb

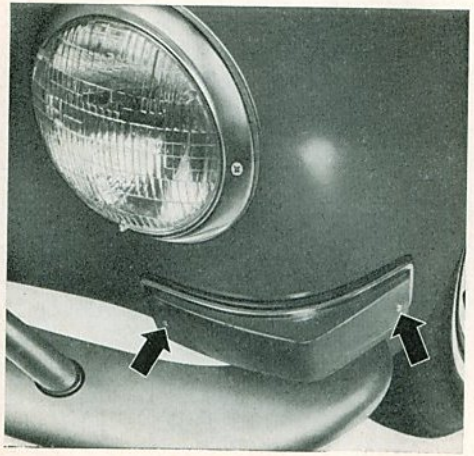
Open rear hood.

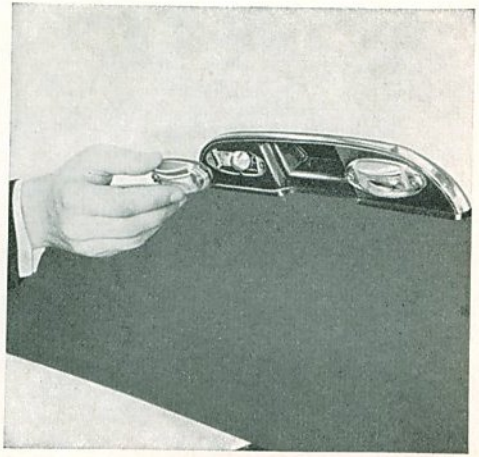
Remove screws on each side of lens and take off lens.

Press bulb lightly into holder, turn and take out.

Install new bulb.

When installing, ensure that the gasket fits properly.

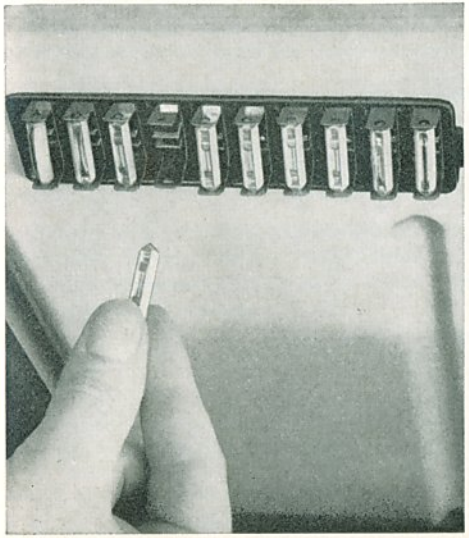




Replacing fuses

The fuse box is located under the instrument panel near the steering column. The transparent lid on the fuse box has symbols embossed on it showing the various circuits.

When a fuse blows, it is not sufficient to merely replace it with a new fuse. The cause of the short circuit or overload must be established. On no account should fuses be patched up with tin foil or wire as this can cause serious damage elsewhere in the electrical system. It is advisible to always carry a few spare 8 amp. fuses in the vehicle.



Fuse box

1 Turn signals
Windshield wipers
Warning lights for:
Brake operation
Automatic Stick Shift and Rear window defogger
(switch current)

2 Stop lights, Horn, Fuel gauge

3 High beam, left
High beam warning light

4 High beam, right

5 Low beam, left

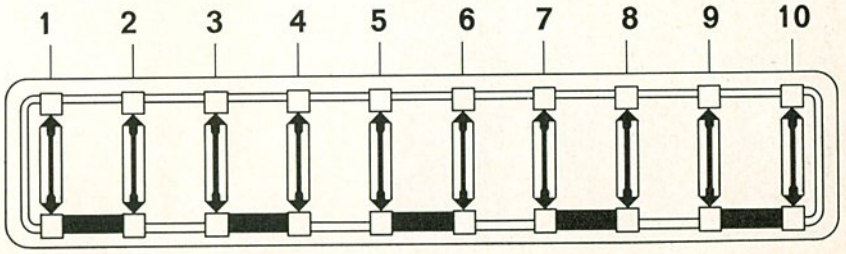
6 Low beam, right

7 Parking and side marker light, left
Tail light, left

8 Parking and side marker light, right
Tail light, right
License plate light

9 Clock, Interior light, Emergency flasher system, Antitheft key warning system

10 Air conditioner

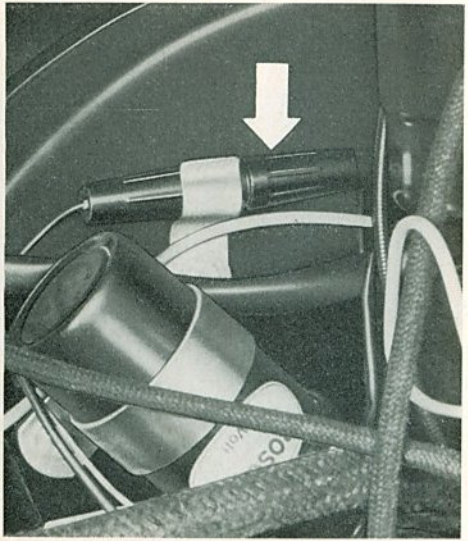


Three additional 8 amp. fuses in separate fuse holders are located above the ignition coil in the engine compartment:

One for the back-up lights

One for the **main current** of the rear window defogger

One for the control valve of the Automatic Stick Shift. If this fuse should ever burn out, the transmission cannot be shifted.



Care of battery

The ability of the engine to start readily depends to a great extent on the condition of the battery. For this reason, the battery should be checked regularly and given a certain amount of attention.

The battery is secured to the floor plate of the engine compartment with two brackets.

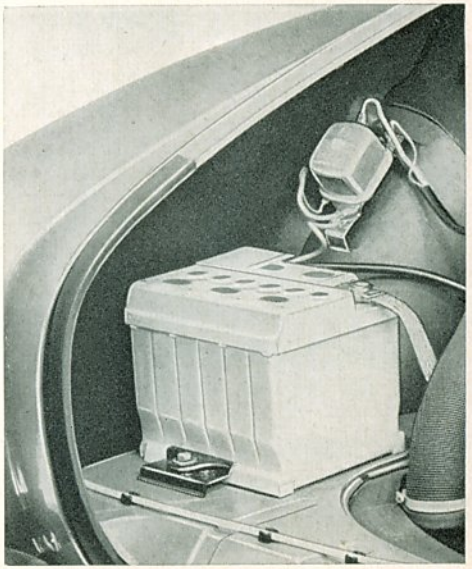
To check the electrolyte level, remove the plugs. The electrolyte level should always be in accordance with the mark. If the level is too low, add distilled water.

The electrolyte level drops when the battery is charged due to dissociation of water used to dilute the acid and, to a lesser extent, to evaporation. How often the battery has to be topped up depends mainly on operating conditions and indirectly on the time of year. When a vehicle is often driven long distances in the daytime with hardly any current being used, the battery will have to be topped up with distilled water much more often than in the case of a vehicle which is operating under different conditions. As a general rule, the battery electrolyte level must be checked more often in the summer than in the winter. VW drivers in hot areas who do a lot of driving are advised to check the battery at least every week.

Do not add more water than is necessary because if the level is too high, the electrolyte will overflow when the battery is being charged and cause damage.

The terminals and connections should be kept clean and greased with battery silicon spray or petroleum jelly. Ensure that the ground connection to the body is free of corrosion and tight.

If you store your vehicle for a prolonged period, it is advisible to take the battery to an Authorized Volkswagen Dealer. A battery which is not in constant use will discharge itself in time and this can cause permanent damage to the plates if the battery is not checked about every four weeks and charged as necessary.



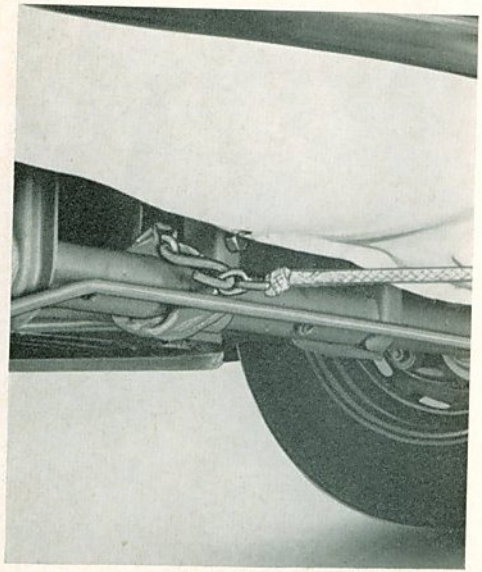
Attention

When working on the battery, take care not to short-circuit the terminals. This would cause the battery to heat up very quickly which could lead to damage.

Before having a quick-charge performed on a battery installed in a vehicle, disconnect both terminals to avoid serious damage to the electronic components of the electrical equipment.

Towing

At the front, the tow rope should be attached to the lower axle tube as near to the frame head as possible.



The driver of the towing vehicle must be particularly careful when starting off and shifting.

The driver of the vehicle that is being pulled must take care to keep the tow rope taut.

On page 31 you will find hints to observe when towing with vehicles equipped with the VW Automatic Stick Shift.

Here is what to do when trouble troubles you

Your Volkswagen should repay you with trouble-free driving if it receives regular maintenance.

Should you ever encounter difficulty in starting your engine or have trouble on the road, there are a few simple repairs which you can make to get your VW going again. Locate the problem and probable cause of the trouble in the Guide on the following pages and follow the directions on what to do.

If the trouble is serious or you are uncertain as to its origin, be sure to see an Authorized VW Dealer as soon as possible.

Note: The adjustment of idling, ignition timing and — on vehicles with four speed synchromesh transmission — throttle positioner requires special equipment and training. We suggest that you consult your Authorized VW Dealer.

Problem	Probable Cause	What To Do
VW will not start: engine will not turn over or turns over too slowly	1. Run down or dead battery	1. A. Four speed synchromesh transmission: Push to start the vehicle (turn on ignition, put in third gear at a speed of approximately 20 mph. Release clutch slowly). Have battery charged and cause of high current consumption checked. B. Automatic Stick Shift: Push to start the vehicle (turn on ignition, shift into driving range L. When towing or pushing, the engine should start at a minimum speed of 15 mph.). Have battery charged and cause of high current consumption checked.
	2. Loose connection A. At battery B. At starter C. At connections behind dash board	2. Make sure that all connections are tight A. Check both cable connections on battery and grounded end of ground strap B. Check connections at solenoid, mounted on starter, under right rear of vehicle C. Check push-on connectors behind dash board
	3. Starter defective	3. Have vehicle started by pushing (see paragraph 1) and take it to nearest Authorized VW Dealer
	4. On vehicles with Automatic Stick Shift: The gear shift lever is not in Neutral	4. Shift to Neutral
VW will not start: engine turns over	5. Loose connection in ignition system	5. Check for loose connections at coil, distributor and spark plugs.
	6. Loose connection in primary circuit to coil	6. Turn on ignition. Remove thin black cable from ignition coil, hold it by insulation and strike against blower housing or other ground, **being careful of gasoline and its fumes.** If no spark, electricity does not reach coil from battery. Check push-on connectors behind dash board. If there is still no spark, see the nearest Authorized VW Dealer.
	7. If spark is present at black coil cable, trouble is in ignition system	7. Check in this sequence: A. Turn on ignition, remove distributor cap and turn engine by the V belt until the ignition points are closed. Open and close ignition points several times with a nonmetal object. A visible and audible spark will appear between the points. If this is not the case, the cables on ignition coil and distributor should be checked for tightness. If even then no spark is visible, see your nearest Authorized VW Dealer. B. If spark appears at points, remove high tension wire from center of distributor cap and hold it against a metal part of the engine at a distance of approximately ¼". Switch on ignition and turn over engine or open ignition points as described under A. A strong blue spark must appear. If this is not the case, see your Authorized VW Dealer.

Problem	Probable Cause	What To Do
VW will not start: engine turns over		C. If a spark appears at high tension cable, the distributor cap should be cleaned inside and outside. Reconnect high tension cable. Remove all spark plugs. If plugs are clean and dry, reconnect ignition cables to spark plugs and bring spark plugs in connection with metal (ground). **Hold cable with dry piece of cloth to avoid shock.** A spark should appear between spark plug electrodes when the engine is turned over. If not, clean and dry ignition cables and spark plug connectors and check that ignition cables are tight in distributor cap and plug connectors. See your Authorized VW Dealer if the above steps did not ensure proper ignition. D. Dirty or wet spark plugs should be cleaned and dried. Install new plugs if necessary Unburned gasoline on plug electrodes points to excessive fuel supply.
	8. If spark is fairly good at plugs, trouble is most likely in fuel system A. Caused by improper starting procedure. If the gas pedal is depressed too often, the accelerator pump in the carburator injects too much gasoline B. Carburetor may be flooded, float or needle valve may be sticking	8. Check fuel system in the following sequence: A. Depress gas pedal completely and operate starter for a prolonged period. If engine does not start, remove and dry spark plugs, turn over engine with plugs removed for approximately 30 seconds. Reinstall plugs and start engine. B. Tap around outside of carburetor with wooden or plastic tool handle. Wait a few minutes and try starting again as described at 8 A.
Engine stalls shortly after starting	9. Poor fuel supply 10. Automatic choke does not open, excessive fuel supply	9. See paragraph 12 through 14. 10. Check whether choke valve is in vertical position after ignition has been switched on for 2—5 minutes (depending on outside temperatures). Cover for choke unit must be hot. If choke valve is binding in a closed position, open at fast idle cam and if necessary, retain with wire. See your Authorized VW Dealer.
Engine stalls while vehicle is driven	11. Defect in ignition system 12. Fuel supply is exhausted 13. Fuel pump filter may be clogged 14. Gasoline may be contaminated by water, dust or dirt	11. See paragraph 5 through 7. 12. Check whether any gasoline is left in tank. 13. After removing the screw plug, the fuel filter can be taken out for cleaning. 14. See your VW dealer for cleaning of all components of the fuel system.
Red warning light for oil pressure comes on while you are driving	15. If light goes on, the oil pressure is too low	15. Stop at once and check oil level. Add oil as necessary. If the oil level is sufficient and light goes on during driving, contact the nearest Authorized VW Dealer before driving on.
Red warning light for generator and cooling comes on while you are driving	16. If light goes on, V belt may be torn or generator does not charge	16. If belt drives generator without slipping, switch off all unnecessary electrical equipment (radio, etc.). Drive to neaerst VW dealer as otherwise the battery will soon run down. If belt is broken, replace it before driving on, because engine cooling fan is no longer working.
Vehicles with Automatic Stick Shift: Lever cannot be shifted	17. Control valve fuse burned out	17. Replace fuse (see page 44). Check cable connections on control valve located on the left in the engine compartment.

Fuel and lubricants

Fuel

Your Volkswagen will run satisfactorily on regular fuels which fulfil the octane requirements of the engine (91 Octane). If regular fuels with adequate anti-knock qualities are not available, premium fuels should be used or mixed with the regular fuel.

Engine oil

Always use a name brand oil labeled "For Service MS" for the engine of your Volkswagen. The quality of oil produced by reputable firms is so good that the choice of brand is entirely up to you. The Volkswagen engine makes no special demands with respect to oil quality which cannot be met by the well-known and pupolar brands. It is suggested that you select "your" brand of oil at the first oil change at 600 miles and that you stick to this brand if at all possible.

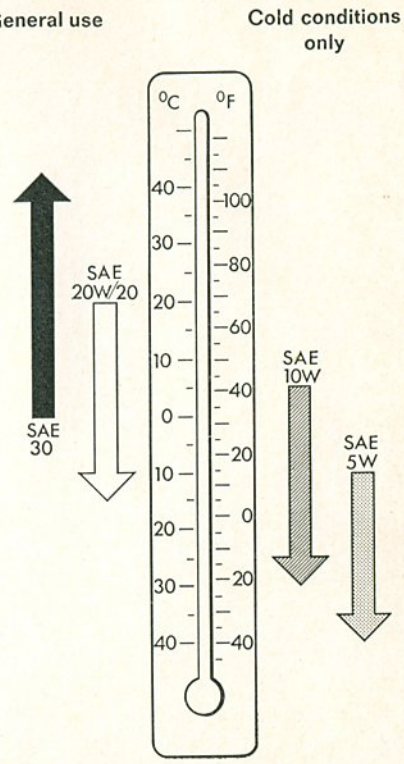
The classification of oil into various viscosity grades is shown by the designations SAE 30, SAE 20 W/20 and so on. The viscosity of a lubricant indicates its resistance to flow at a given temperature. The VW engine usually requires only two different viscosity grades which are used, according to season of year, as follows:

SAE 30	In warm seasons and all year round in areas with hot climate.
SAE 20 W/20	In the winter.
or	
SAE 10 W*)	In areas where the average temperature is below 5 ° F.
SAE 5 W*)	In areas with arctic climate and temperatures below — 13 ° F.

*) Avoid driving at high speeds for long periods if using SAE 10 W oil and the outside temperature is above 32° F or if using SAE 5 W oil when the temperature is above 5° F.

All SAE grades cover a temperature range of about 60 ° F and the ranges of two neighboring grades overlap by at least 30 ° F. Brief variations in temperature between seasons can therefore be disregarded. For the same reason, it is possible to mix oils of different viscosities when oil has to be added between oil changes and the viscosity of the oil in the engine no longer corresponds to the actual temperature.

Temperature ranges of SAE grades



Transmission oil and ATF (Automatic Transmission Fluid)

Transmission and final drive are both lubricated with hypoid oil:

SAE 90	In general all year round.
SAE 80	In areas with cold climate.
ATF	In areas with arctic climate and temperatures below — 13 ° F.

ATF is a special fluid for automatic transmissions but ATF can also be used in manual transmissions under the above mentioned climatic conditions.

The torque converter of the Automatic Stick Shift requires ATF all year round.

All ATF's which carry the Dexron ® testmark with a five digit number preceded by the letter "B" can be used. Suitable products are supplied by all well-known mineral oil firms.

Lubricant additives

No additives should be mixed with fuel or lubricating oils and fluids.

Grease

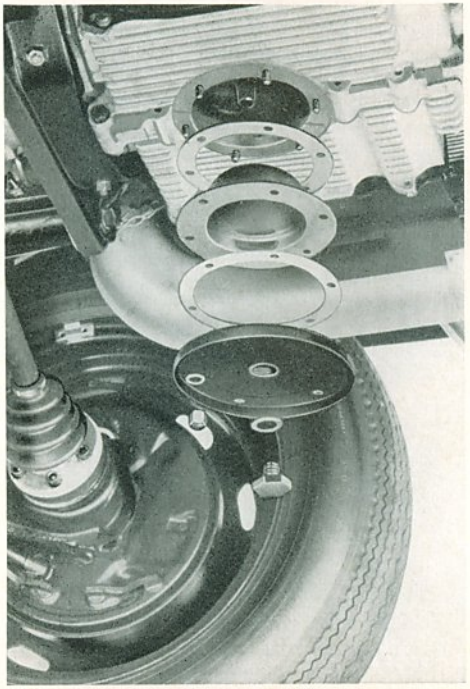
1. **Multi-purpose grease with a lithium base** should be used for the front axle.
2. **Dry stick lubricant** should be used for the hood locks and the sliding surfaces of the striker plates.
3. **Silicon spray or petroleum jelly** should be used for the battery terminals and posts.

Engine

Regular oil changes are necessary even if the very best brand of oil is used because dirty oil in the engine means increased wear and reduces service life.

The oil is drained, when warm, by removing the plug in the oil strainer cover plate. Flushing is not necessary but the strainer must be removed and cleaned at every oil change. The gaskets and the copper washers under the cap nuts must always be renewed. The engine is then filled with 5.3 US pints of oil — labeled "For Service MS".

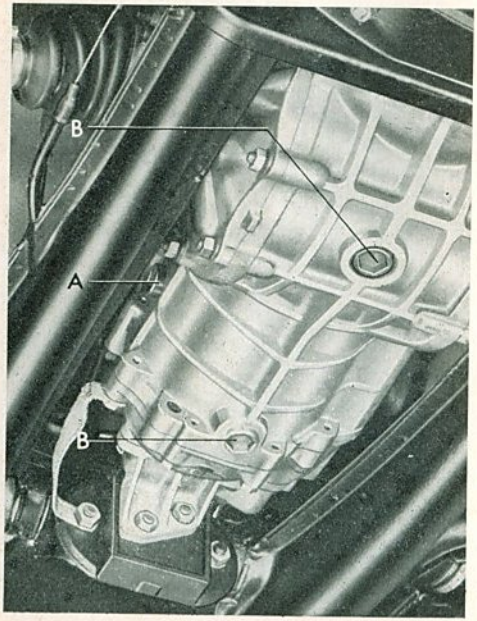
Due to its detergent properties the fresh oil will look very dark after the vehicle has been running for only a short time. This need not worry you, and under normal operating conditions there is no reason whatever to change the oil at shorter intervals than every 3000 miles. We do recommend more frequent oil changes — every 1500 miles — in the winter if you drive mostly short distances and in city traffic: If you drive only a few hundred miles a month under these conditions, it is advisible to have the oil changed every 6 to 8 weeks. In areas with arctic climate where average temperatures are below — 13 ° F the oil should be changed every 750 miles.



Manual transmission and Automatic Stick Shift

Transmission and final drive are combined in one housing and both are lubricated with the same hypoid oil. The oil should be up to the edge of the filler hole (A).

The transmission oil is only changed at 600 miles by your Authorized VW Dealer. Should it later on become necessary to change the oil because of a considerable and prolonged change in temperature (see page 51), proceed as follows.



At oil changes the old oil should be drained when warm. The magnetic oil drain plugs — two on the four speed synchromesh transmission (both B) and one only on Automatic Stick Shift (C) — must be cleaned carefully. On vehicles with Automatic Stick Shift, the transmission oil pan has to be removed and the oil pan gasket must be replaced.

Fill up 5.3 US pints on four speed synchromesh transmission and 6.3 US pints on Automatic Stick Shift of quality hypoid oil.

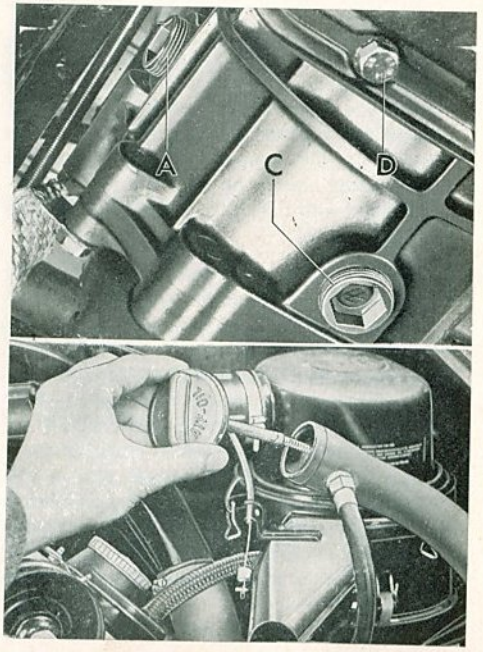
Sometimes the oil runs into the transmission housing very slowly. If one attempts to put the oil in too quickly, it may overflow and give the impression that the housing is already full although only 2—3 pints have been put in. It is essential to the service life and silent running of the transmission that the correct amount of oil is used.

The oil level in the transmission should be checked every 6000 miles. At the same time the transmission should be checked for leaks and, on vehicles with Automatic Stick Shift, the mounting bolts (D) of the transmission oil pan have to be checked for tightness.

On vehicles with Automatic Stick Shift, the ATF in the torque converter does not have to be changed, but the level should be checked every 6000 miles with engine switched off.

An ATF tank filler (E) with a dipstick attached to its cover is provided for this purpose on the right side in the engine compartment. The fluid level should be between the two marks on the dipstick and should never fall below the lower mark. If necessary, fill up with ATF and check for leaks.

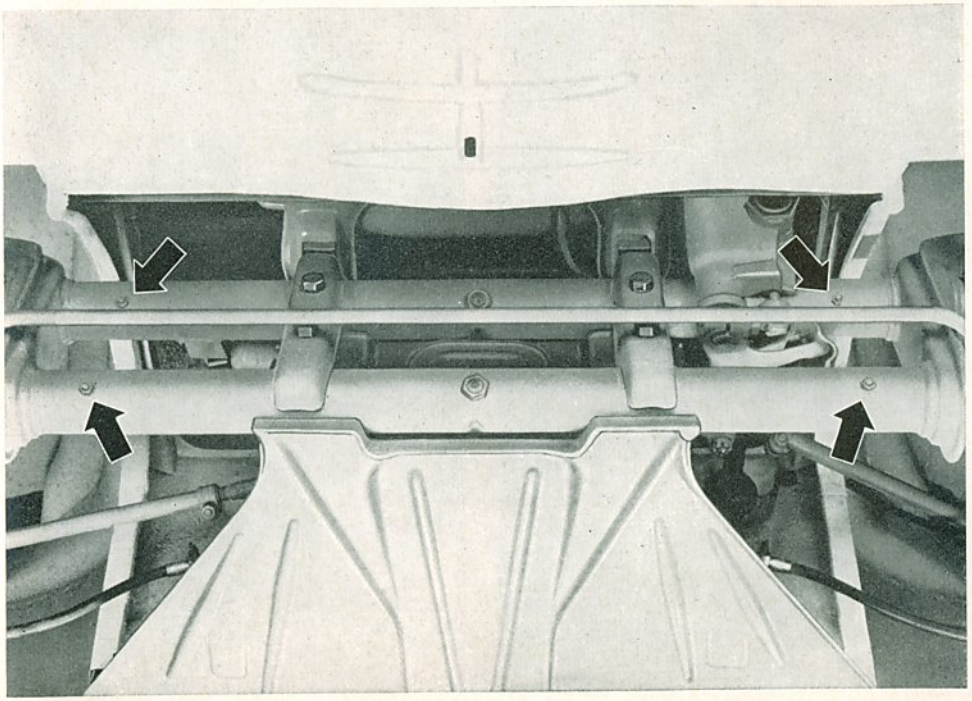
See page 51 for ATF specifications.



Front axle

The front axle can only be lubricated properly when it is free of load, that is with the front end lifted.

There are four grease fittings on the axle tubes which must be lubricated with a lithium-based multi-purpose grease. The fittings and the grease gun nozzle should be cleaned carefully before greasing commences. Place gun on fittings and inject grease until fresh grease starts to come out at the torsion arm sealing rings.



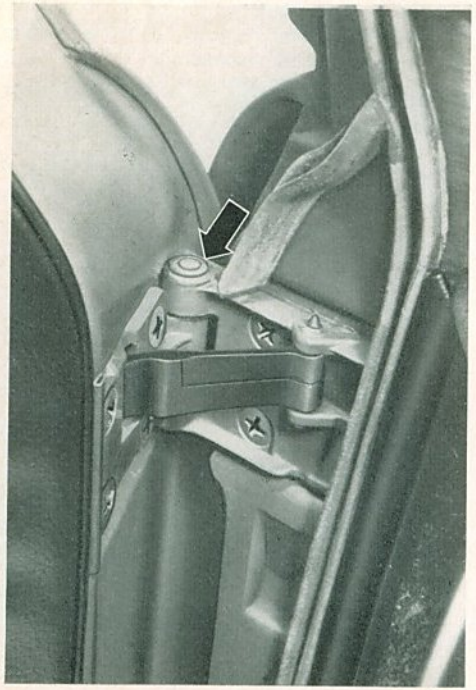
Grease and oil must not be left on tires and brake hoses for long periods. Even small traces should be wiped off immediately.

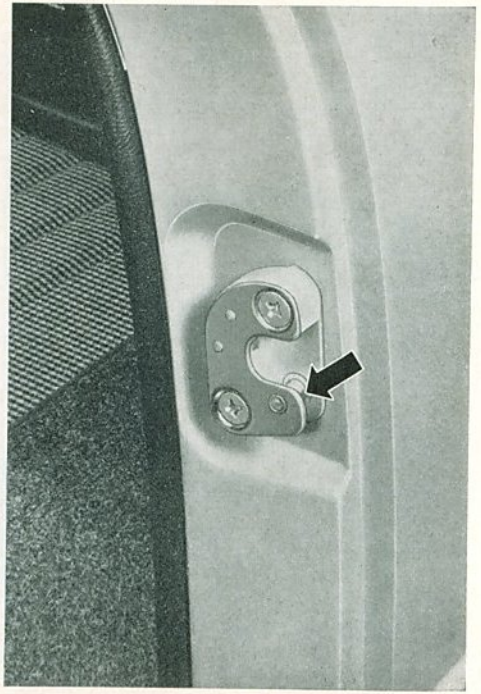
If the vehicle is driven less than 6000 miles per year, the front axle must be lubricated once a year.

Hinges and locks

Above the door hinge pin is a small oil chamber which is sealed with a plastic plug. At least every three months, the amount of oil in the chamber should be checked after lifting the plug with a screwdriver. The chamber should be filled with SAE 30 engine oil. Press plug in and wipe off excess oil with a cloth.

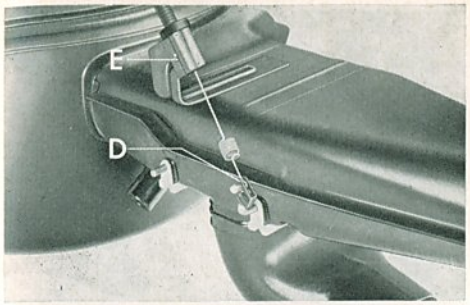
The friction surfaces of the striker plates should be lubricated lightly as and when required.

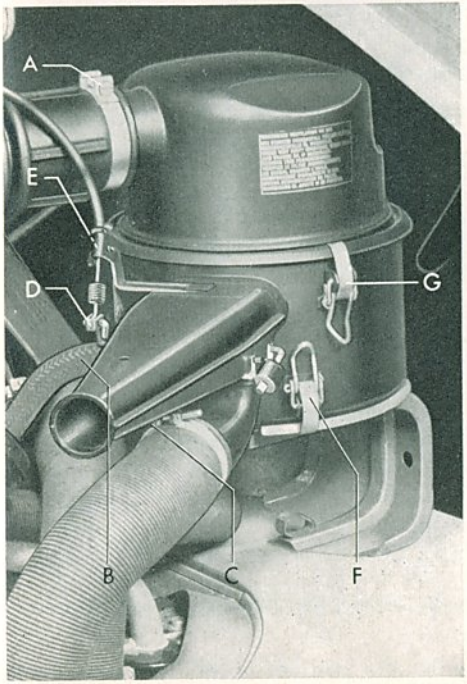




The hood hinges should be oiled and the hood locks greased lightly.

The lock cylinder is treated with graphite as necessary. The key can be dipped into graphite and then turned in the lock a few times.





Air cleaner

A dirty cleaner element not only reduces the engine output, it can also cause premature engine wear. If local conditions are such that the vehicle is often driven on very dusty roads, the cleaner must be checked frequently, even daily if necessary.

All the dust present in the air drawn in by the engine is retained by the filter element in the upper part of the air cleaner and washed out by the oil in the lower part when the vehicle is in motion. In time, this forms a layer of sludge at the bottom of the lower part. When there is only $^3/_{16}$" of oil above the sludge layer, the lower part must be cleaned and filled with fresh oil. To accomplish this the air cleaner must be removed:

Loosen clip — A — on intake elbow and take elbow off.
Pull crankcase ventilation hose — B — off.
Loosen clip — C — on hose for preheated intake air and pull hose off.
Remove retaining clamp — D — of cable for warm air control flap and disconnect cable.
Loosen screw — E — on outer cable retainer and pull cable out.
Release clips — F — securing cleaner to bracket and take cleaner off.
Loosen the three upper clips — G —, take cleaner upper part off and put it down with the filter element downward.

Clean bottom part carefully and put in .95 pint of fresh engine oil. SAE 30 oil should be used all the year except in areas with arctic climate where SAE 10 W oil should be used all the year. The top part does not normally need cleaning. If due to delayed cleaning of the bottom part or oil shortage the filter element has become so dirty that the air inlet holes on the underside are partly blocked, the encrusted dirt should be scraped off with a woodchip.

After assembling the cleaner, secure it to the bracket in the engine compartment with the two clips. Before connecting the cable for the warm air control flap, check that the flaps move freely. Then push the outer cable into the retainer as far as it will go. After tightening the screw — E — attach the end of the inner cable with the clamp — D — to the lever of the non-weighted flap. Tighten intake elbow clip carefully.

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GENUINE VW PARTS are the proper replacement parts for the Volkswagen. They guarantee accuracy, quality and reliability. Every part of the Volkswagen is available as a Genuine VW Part and all are of the same high quality as the original parts on the vehicle when it leaves the factory. The Genuine VW Parts are expertly installed at any Authorized Volkswagen Dealership.

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Please consult your Authorized Volkswagen Dealer on all questions concerning repairs. You can be sure that your vehicle will be in good hands.

Technical data

Engine

Four cylinder, four stroke, horizontally opposed, in rear. Air cooling by fan, thermostat-controlled.
Pressure oil feed with gear-type pump. Oil cooler. Mechanical fuel pump.
Downdraft carburetor with automatic choke and accelerator pump.
Oil bath air cleaner with thermostat-controlled air pre-heating. Exhaust emission control system.

Bore	3.36 in. (85.5 mm)	
Stroke	2.72 in. (69 mm)	
Capacity	96.6 cu. in. (1584 cc)	
Compression ratio	7.5 : 1	
Maximum output SAE	57 bhp. at 4400 rpm.	
Maximum torque SAE	81.7 lb. ft. at 3000 rpm.	
Valve clearance with engine cold	Intake and exhaust .004 in. (0.10 mm)	
Fuel consumption[1])	Four speed synchromesh transmission:	Automatic Stick Shift:
	U. S. — 26.7 miles per gallon	U. S. — 25.3 miles per gallon
	Metric — 8.8 liters per 100 km	Metric — 9.3 liter per 100 km
	Imp. — 32.0 miles per gallon	Imp. — 30.3 miles per gallon
Fuel rating	91 Octane (Regular)	
Oil consumption	U. S. — 1.7—3.4 pints per 1000 miles	
	Metric — 0.5—1.0 liter per 1000 km	
	Imp. — 1.4—2.9 pints per 1000 miles	

[1]) Measured consumption plus 10%, with half load at a steady ¾ of maximum speed on level road

Power transmissions

a — Four speed synchromesh transmission:

Single plate, dry clutch. Clutch pedal free play: .4—.8 in. (10—20 mm).
Baulk synchronized four-speed gearbox and bevel gear differential in one housing.
Gear ratios: 1st gear 3.80:1, 2nd gear 2.06:1, 3rd gear 1.26:1, 4th gear 0.89:1, Reverse gear 3.61:1.
Differential ratio: 4.125:1. Drive shafts with two constant velocity joints per shaft.

b — Automatic Stick Shift:

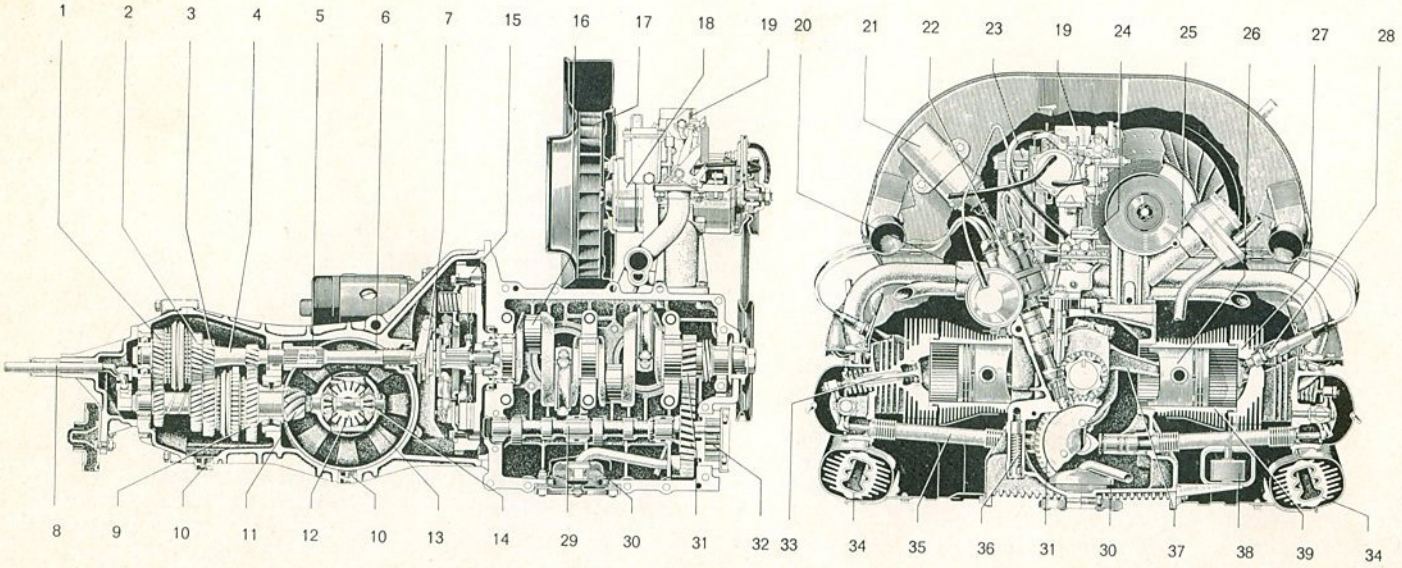
Hydrodynamic torque conventer with three speed synchromesh transmission, combined with final drive in one housing.

Gear ratios:	Driving range L:	2.06:1,	Driving range 1:	1.26:1,
	Driving range 2:	0.89:1,	Reverse range:	3.07:1.

Differential ratio: 4.375:1. Drive shafts with two constant velocity joints per shaft.

Engine with four speed synchromesh transmission

1 — 4th gear
2 — 3rd gear
3 — 2nd gear
4 — Drive shaft, front
5 — Reverse gear
6 — Drive shaft, rear
7 — Clutch release bearing
8 — Transmission shift lever
9 — 1st gear
10 — Oil drain plugs
11 — Drive pinion
12 — Differential side gear
13 — Differential housing
14 — Differential pinion
15 — Flywheel
16 — Crankshaft
17 — Fan
18 — Generator
19 — Carburetor with throttle positioner
20 — Intake manifold
21 — Ignition coil
22 — Distributor
23 — Oil cooler
24 — Fuel pump
25 — Oil filler and breather
26 — Piston
27 — Cylinder head
28 — Spark plug
29 — Camshaft
30 — Oil strainer
31 — Camshaft drive gears
32 — Oil pump
33 — Valve
34 — Heat exchanger
35 — Push rod tube
36 — Oil pressure relief valve
37 — Connecting rod
38 — Thermostat
39 — Cylinder



Chassis

Platform frame with tunnel-shaped center member — Front axle bolted to frame head, engine/transmission unit bolted to frame fork — Independent wheel suspension: torsion arms at front, trailing arms and diagonal links at rear
Torsion bar springing, telescopic shock absorbers, stabilizer at front
Roller steering with maintenance free tie-rods and hydraulic steering damper
Hydraulic four-wheel dual circuit foot brakes, disc brakes at front
Mechanical hand brake effective on rear wheels

Wheelbase	94.5 in. (2400 mm)
Turning circle diameter	37 ft. (11.25 m)
Track at front	51.6 in. (1310 mm)
Toe-in	.08 to .18 in. (2 to 4.5 mm) unladen
Camber	30′ ± 20′ unladen
Track at rear	53.3 in. (1350 mm)
Wheels	4½ J x 15 safety rim wheels

Tires, tubeless: Bias Ply Tires 5.60 S 15
load capacity 970 lbs. at 32 psi

Tire, pressures, cold

	front	rear
with 1 or 2 occupants	16 psi (1.1 kg/cm²)	24 psi (1.7 kg/cm²)
fully loaded	17 psi (1.2 kg/cm²)	26 psi (1.8 kg/cm²)

For long, high speed trips, the tire pressures should be increased by 3 psi (0.2 kg/cm²) at front and rear.

Electrical system

Voltage	12 volts
Battery	45 Ah
Starter	0.7 hp
Generator	max. 360 watts, early cut in
V belt size	9.1 or 9.5 x 900
Ignition distributor	with vacuum spark advance
Firing order	1—4—3—2
Basic ignition timing	TDC — engine at operating temperature
Contact breaker gap	.016 in. (0.4 mm)
Spark plugs	Bosch W 145 T1 Beru 145/14 — or plugs with similar values from other manufacturers
Plug thread	14 mm
Plug gap	.028 in. (0.7 mm)

Dimensions and weights

Length	163.0 ins. (4140 mm)
Width	64.3 ins. (1634 mm)
Height	52.0 ins. (1320 mm)
Ground clearance	5.9 ins. (150 mm)
Unladen weight (ready for use)	1918 lbs. (870 kg)
Permissible load	727 lbs. (330 kg)
Gross vehicle weight	2645 lbs. (1200 kg)
Permissible front axle load	1102 lbs. (500 kg)
Permissible rear axle load	1565 lbs. (710 kg)
Permissible roof and trailer weight:	
Roof weight[1])	110 lbs. (50 kg)
Trailer without brakes	880 lbs. (400 kg)

[1]) Applies only to roof rack mounted to rain gutters of the Coupé. Distribute load evenly!

Capacities

Fuel tank	10.6 U.S. galls (40 liters; 8.8 Imp. galls)
Engine	5.3 U.S. pints (2.5 liters; 4.4 Imp. pints)
Transmission and final drive	5.3 U.S. pints
On vehicles with Automatic Stick Shift:	
Torque converter circuit	approx. 7.6 U.S. pints ATF[2]) (3.6 liters; 6.3 Imp. pints)
Transmission and final drive	approx. 6.3 U.S. pints Hypoid oil (3.0 liters; 5.3 Imp. pints)
Brake system	approx. .53 U.S. pints (0.25 liter; .44 Imp. pints)
Oil bath air cleaner	approx. .95 U.S. pints (0.45 liter; .79 Imp. pints)
Windshield washer	approx. 3.6 U.S. pints (1.7 liter; 3 Imp. pints)
	operating pressure 43 psi (3 kg/cm²)

[2]) Does not have to be changed

Performance

	Four speed synchromesh transmission	Automatic Stick Shift
Maximum and cruising speed	84 mph. (135 kph)	81 mph. (130 kph)
Acceleration time from 0—50 mph (0—80 kph)	approx. 12.5 seconds	approx. 14.5 seconds
Climbing ability		
1st gear	45.5 %	Driving range L 36 %
2nd gear	24 %	Driving range 1 30 %
3rd gear	13.5 %	Driving range 2 21 %
4th gear	8 %	

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