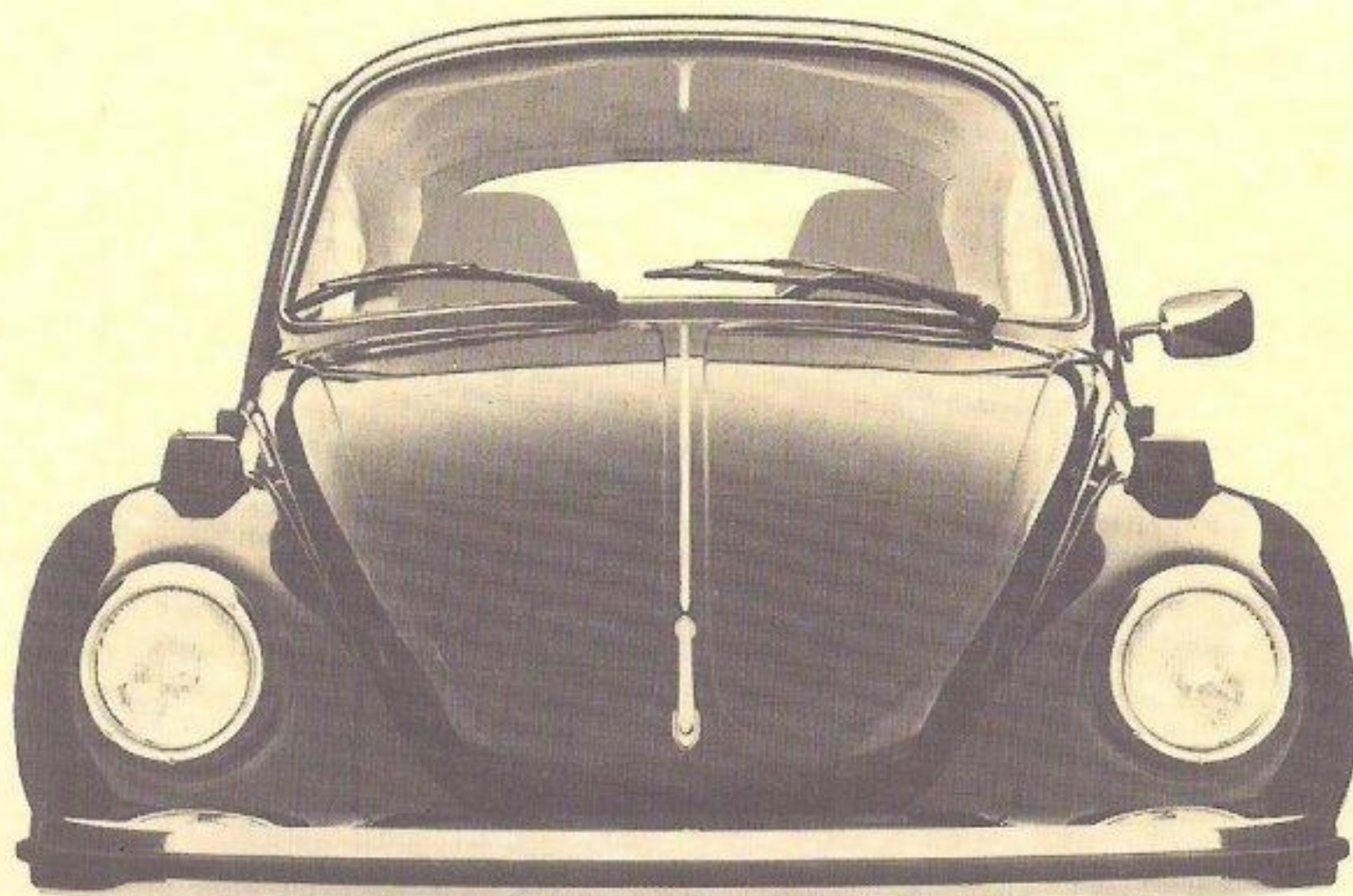




# Instruction Manual

Operation and Data

VW 1303





# **Instruction Manual**

**Part 1:  
Operation and Data**

**VW 1303 A  
VW 1303  
VW 1303 S**

**August 1973**

**VOLKSWAGENWERK AG · WOLFSBURG**

# Contents

	Page		Page
<b>Introduction</b> . . . . .	3	Heating . . . . .	17
<b>Concerning your safety</b> . . . . .	4	Gearshift lever, handbrake . . . . .	18
<b>Operation</b>		Refueling, windshield washer container . . . . .	19
Keys, doors and windows . . . . .	6	Brake fluid reservoir, engine oil level . . . . .	20
Seats . . . . .	7	Starting the engine . . . . .	21
Instrument panel . . . . .	8	Warning lamps . . . . .	22
Steering lock/starter switch . . . . .	9	Luggage compartments . . . . .	23
Speedometer with fuel gauge, clock . . . . .	10	Radios . . . . .	26
Turn signal and dimmer switch, emergency light switch . . . . .	11	Seat belts . . . . .	28
Lighting switch, interior mirror, interior light . . . . .	12	Convertible top . . . . .	29
Windshield wipers, washer . . . . .	13	Selector automatic . . . . .	31
Sliding roof, sun visors, heated rear window . . . . .	14	<b>Data</b>	
Ashtrays, cigar lighter, glove box . . . . .	15	Technical data . . . . .	38
Fresh air ventilation . . . . .	16	Identification plate, Chassis and Engine Numbers . . . . .	43
		Vehicle data quiz . . . . .	44

This manual tells you how to drive your Volkswagen and how to look after it.

The pictures and text in the manual are based on the VW 1303 with a number of optional extras, some of which may be part of the L equipment. Where the controls and technical details on the other 1303 models differ significantly, attention is drawn to the difference.

The Volkswagen factory is working continuously on the development of all VW models. We trust, therefore, that you will appreciate that we must reserve the right to alter, without notice, any part of the vehicle or equipment. No legal commitment is thus implied by the data, illustrations or descriptions in this manual.

**Volkswagenwerk Aktiengesellschaft**

# Introduction

The following important publications are supplied with your new Volkswagen:

the Instruction Manual in two parts  
and the Service Record.

This part of the Instruction Manual, "Operation and Data" tells you how to use the various levers, switches and knobs and explains the functions of the instruments and warning lamps. Short notes supplement these remarks and explain in detail what happens when controls are operated. A summary of the main technical data is given at the end of the booklet.

You are strongly advised to read this part of the instruction manual before setting off on your first trip.

The second part of the manual "Driving, Car Care, Do-it-yourself" has been written for all those VW drivers who require just a little more information about driving their cars and for those who like to look after their cars themselves. For those small defects which are bound to happen to us all sooner or later, we have included a DIY section. In any case, do not forget that you have this information available when required. For those who read both parts of the instruction manual there should be no problems in running a VW.

The Service Record explains the VW Diagnosis and Maintenance System and contains amongst other things, the warranty voucher and the terms of warranty. When your VW workshop carries out the diagnoses and the maintenance services, they stamp the Service Record.

Always have the Service Record with you when you take the vehicle to a VW workshop — it helps to establish proper contact with the workshop staff.

## **A word about the warranty conditions:**

It is in your interest to have your vehicle maintained as laid down in the Service Record. Proper treatment and complete proof that all specified maintenance work has been carried out by an authorized VW workshop are stipulations for the upholding of any warranty claims for damage to parts which are subject to care and maintenance.

# Concerning your safety

(Well worth reading before or after studying the rest of the manual.)

For years now our engineers have been leading the field in the development of safe automobiles.

Your Volkswagen is the product of this experience:

Your vehicle is equipped with all the safety features of design and trim which are necessary and which we consider practical. All for your safety, your protection and, in addition, to reduce the danger to other road users if the worst comes to the worst.

Here are just a few of these safety features:

- Independent suspension at front and rear. Suspension struts at front, double-joint axle at rear, positive wheel location, uniform roadholding.
- Good weight distribution due to front luggage compartment, no sagging at rear, headlight settings always correct even when vehicle is fully loaded.
- Dual circuit brake system.
- Large, brilliant tail and turn signal lights, back-up lights on request.
- Pneumatic windshield washer and two-speed wipers.
- Safety cell passenger compartment, front and rear ends designed to absorb impact energy.
- Knobs and switches on instrument panel designed so as to be safe on impact and clearly marked with symbols.

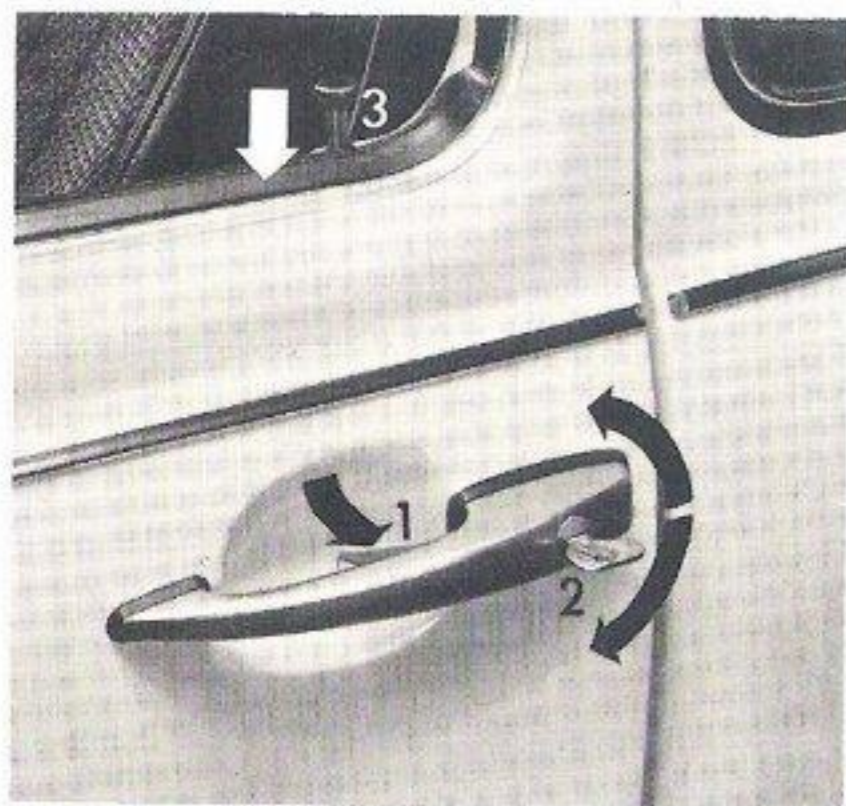
As an interested reader you will soon realize, without knowing a great deal about technical matters, that numerous details of your vehicle are designed in such an elaborate way to offer you the highest possible degree of active and passive safety.

- Safety steering column; energy-absorbing steering wheel hub.
- Firmly fixed individual front seats, backrest and seats fully adjustable. Backrests locked to prevent them tilting forward.
- Padded sun visors.
- Large outside driving mirror, hinged to yield on impact. Inside mirror falls out on impact.
- Recessed door inner controls, inner locking knobs.
- Side protection plates also designed as running boards.
- Rounded outer door handles with built-in impact proof press buttons.
- Rotary latch, anti-burst door locks.

You will agree that your Volkswagen has a lot of built-in safety.

# Operation

# Keys, doors and windows



## Keys

Only one key is required to open the doors, start the engine and lock the engine compartment lid (if a lock is fitted).



It is a good idea to note the number of the key. If you should lose a key you can then obtain a replacement from your VW Dealer by quoting the number. The other key is for the lockable glove box lid.

## Doors

### Operating from outside

To open door: Press trigger (1)

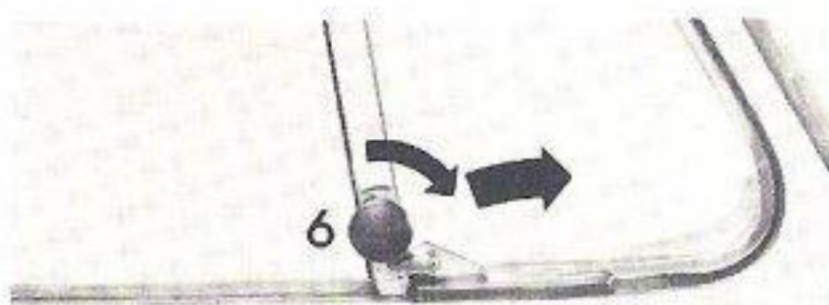
To lock and unlock door with key: Turn key clockwise or anti-clockwise (2). The key is inserted or withdrawn in the center position.

To lock door without key:

Press locking knob (3) down and depress trigger (1) when closing door.

### Operating from inside

To open door: Pull release lever (4).



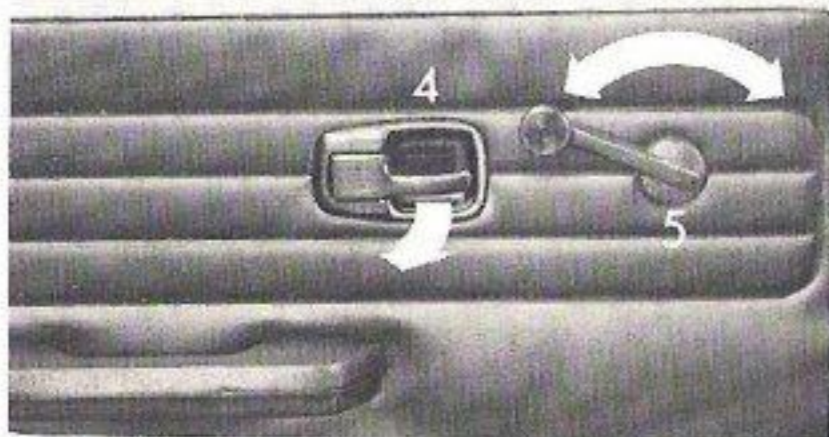
## Windows

To open and close **door window**: Turn the crank (5)

### Vent wings (6)

To open: Turn knob until locking lug points forward and then swing the fastener to the front.

To close: Pivot until frame is pressing against seal at the front then swing fastener to the rear.



If the door closes on its own, the locking knob springs up: this prevents you from being locked out with the key inside.

In order to ensure that the doors can be opened from outside in an emergency, do not press the locking knobs down when vehicle is in motion.

As long as the locking knobs are depressed the doors cannot be opened from inside either.

Before closing a door, open a vent wing so that the air inside the body can escape.



# Seats

After adjusting the seat, engage lever properly so that the seat cannot move while you are driving.

## To move seat to or fro

Pull lever (1) on the tunnel to the rear and slide seat to desired position.

## To adjust backrest rake

Lift lever (2) on outer side of seat frame, push backrest to desired angle by moving upper part of body and release lever.

## To adjust backrest on vehicles with reclining seats

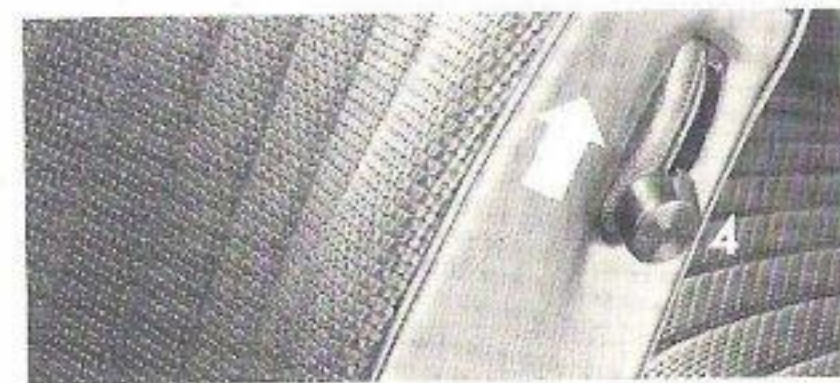
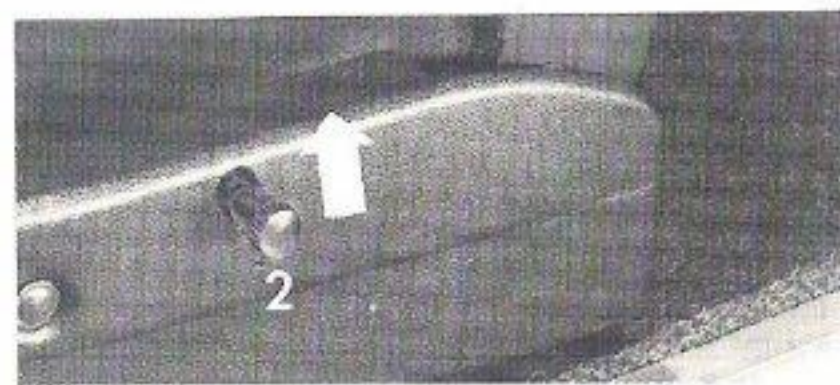
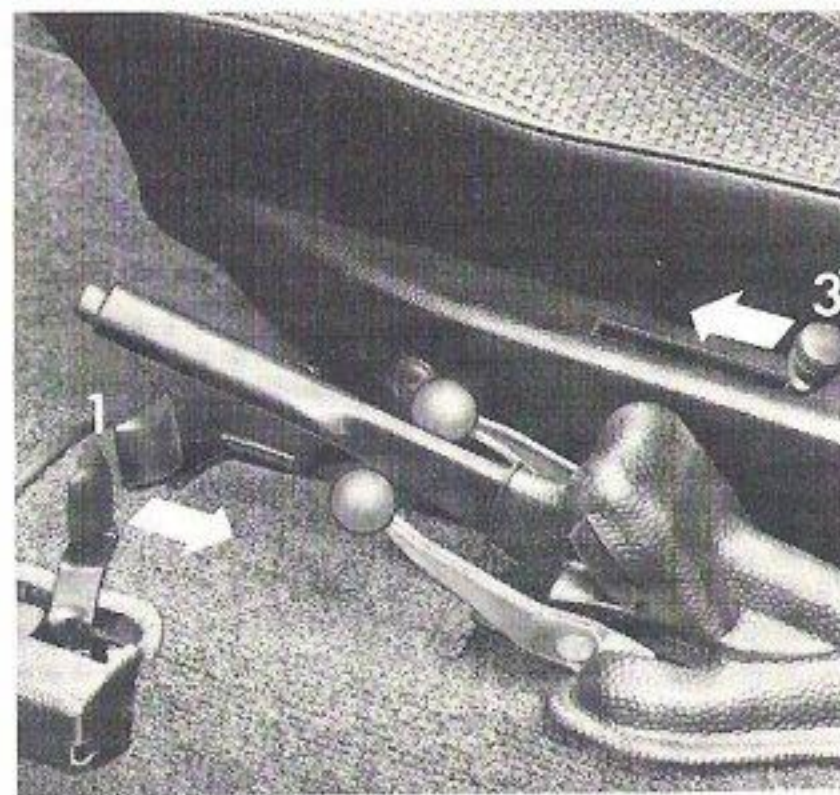
Lift lever (2) and push backrest to the position desired.

Release lever

To lift backrest again, just move lever (2).

## Backrest lock

Lift knob (4) and fold backrest forward. The backrest is held in the forward position automatically. To return backrest to normal position, lift knob (4) again.



A reclining seat operated with 2 levers is supplied for some export countries:

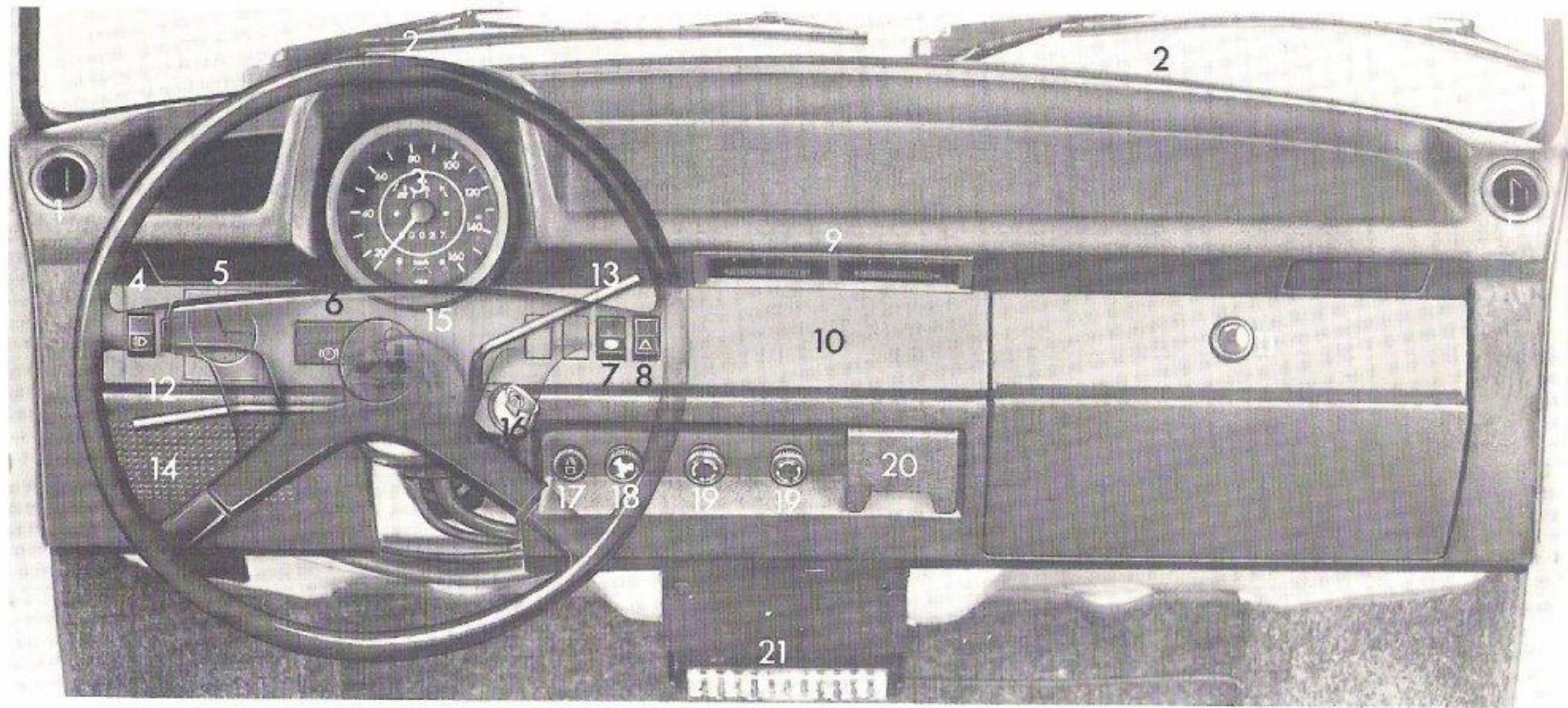
Lift lever (2) and press backrest back to stop.

Then pull additional lever (3) on inside of seat frame to the front and press backrest to the reclining position required.

Release lever (2).

To lift the backrest again, just move lever

# Instrument panel



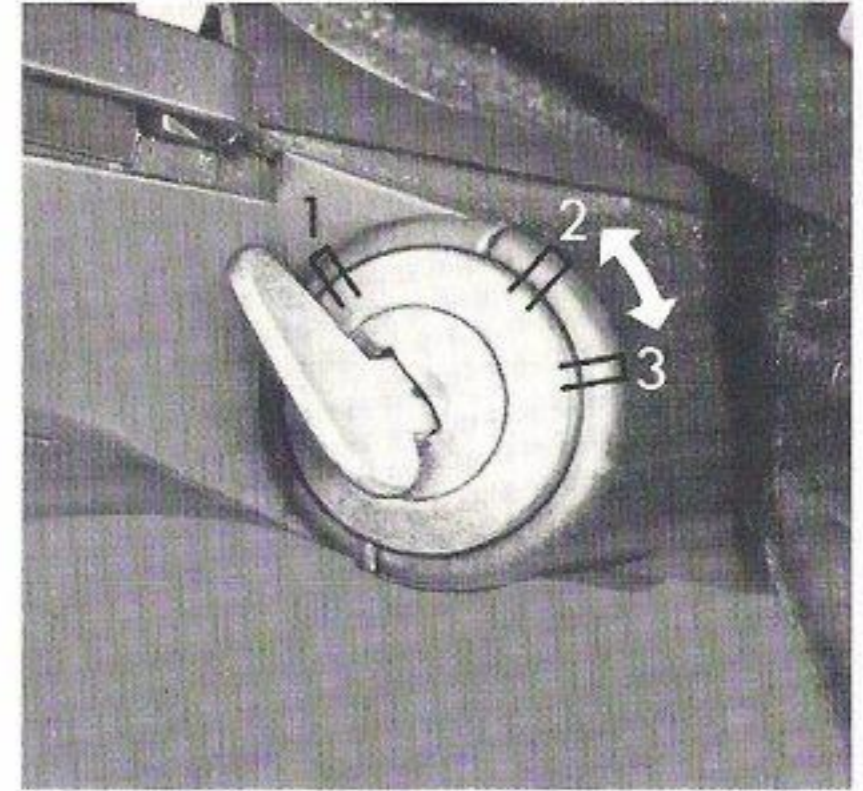
- |   |   |                                   |
|---|---|-----------------------------------|
| 1 — Adjustable mixing vents for side windows                | 7 — Switch for heated rear window                     | 15 — Horn plate                   |
| 2 — Mixing vents for windshield                             | 8 — Emergency light switch with built-in warning lamp | 16 — Steering lock/starter switch |
| 3 — Speedometer with fuel gauge and warning lamps           | 9 — Adjustable fresh air vent                         | 17 — Cigar lighter                |
| 4 — Lighting switch with knurled disc for instrument lights | 10 — Radio aperture coverplate                        | 18 — Fresh air fan switch         |
| 5 — Clock, quartz controlled                                | 11 — Glove box  | 19 — Fresh air control knobs      |
| 6 — Dual circuit brake and handbrake warning lamp           | 12 — Turn signal and dimmer switch                    | 20 — Ashtray                      |
|   | 13 — Lever for windshield wiper and washer            | 21 — Fuse box                     |
|   | 14 — Loudspeaker grille                               |                                   |

# Steering lock / starter switch

## Switching ignition on

Key positions:

- 1 — Ignition off, steering locked
- 2 — Ignition on, warning lamps light up (see page 22).
- 3 — Starting (see page 21).



The key is inserted into the lock and withdrawn only position 1.

If the key is difficult to turn in the lock or cannot be turned to position 2 at all, the steering wheel must be turned to and fro slightly to release the locking pin.

## Steering lock

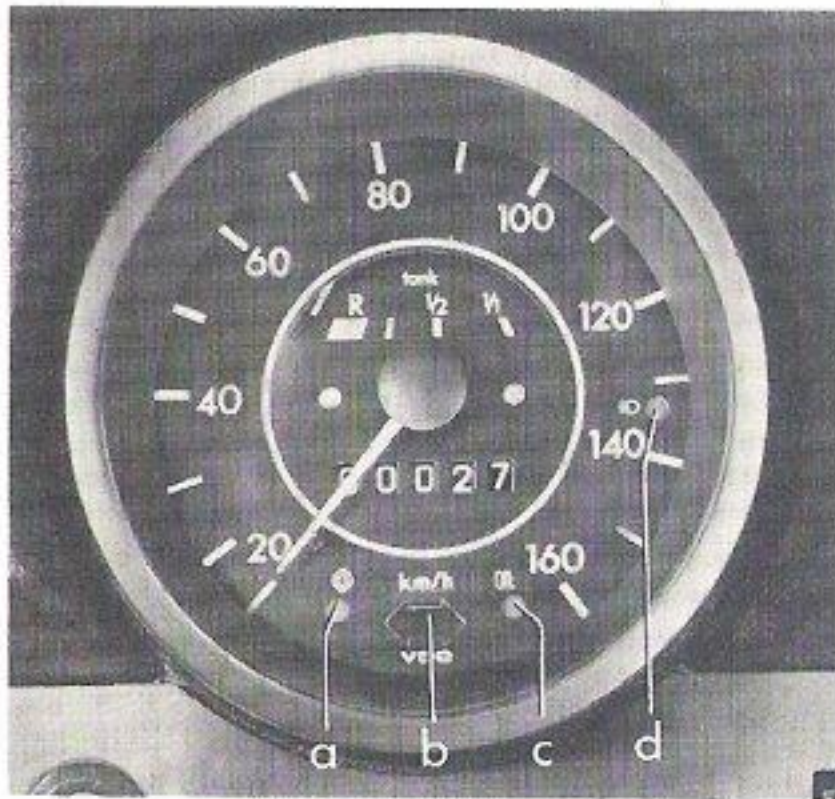
After withdrawing the key, rock the steering wheel to and fro slightly until you hear the locking pin engage — the steering lock is then effective.

### Caution:

Withdraw key only when vehicle is stationary as otherwise the lock will engage when the steering wheel is turned.



# Speedometer with fuel gauge, clock



## Speedometer

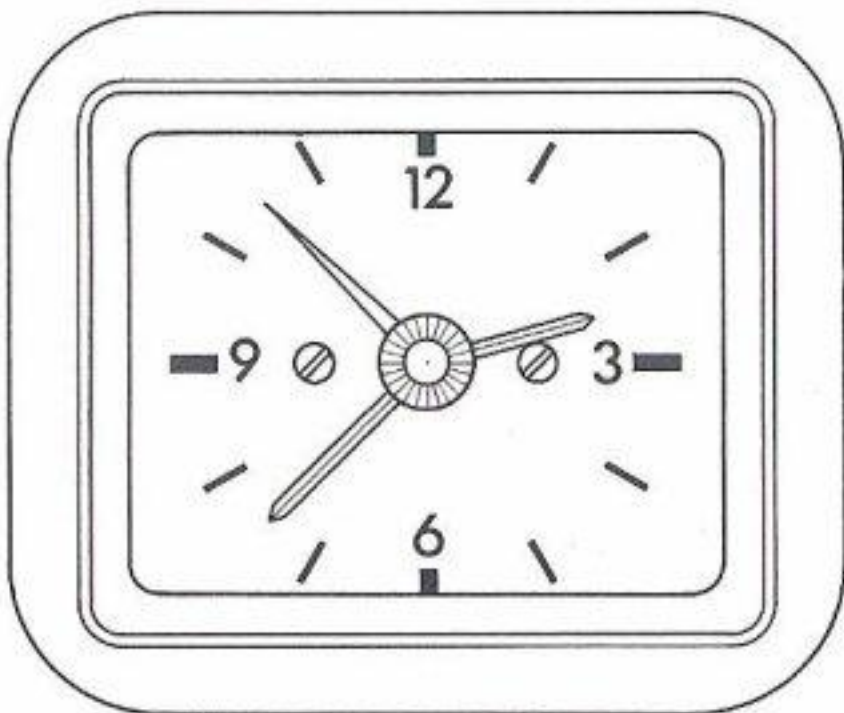
Warning lamps with symbols:

- a — Generator and engine cooling red
- b — Turn signals green
- c — Oil pressure red
- d — High beam blue

When the ignition is switched on, the warning lamps for the oil pressure, generator and brake system (if a lamp is fitted) light up and they should go out when the engine is started.

On vehicles with a brake system warning lamp, this lamp should go out when the handbrake is released.

These warning lamps should not normally light up when vehicle is in motion (see page 22).



## Fuel gauge

The fuel gauge only works when the ignition is on.

When the needle gets to the beginning of the reserve zone "R", there are about 5 liters of fuel left in the tank.

## Clock

The clock is electrically driven and quartz controlled.

To set hands push knob in dial in and turn.

Permissible speed ranges for each gear:

		1.2 liter engine	1.3 liter engine
1st gear	km/h	0—25	0—35
2nd gear	km/h	15—45	20—50
3rd gear	km/h	30—80	35—85
4th gear	km/h	45—115	50—125

		1.6 liter engine
1st gear	km/h	0—30
2nd gear	km/h	20—60
3rd gear	km/h	35—95
4th gear	km/h	50—130

Economic speed ranges

		1.2 liter engine	1.3 and 1.6 liter engine
2nd gear	km/h	15—40	20—45
3rd gear	km/h	35—65	35—70
4th gear	km/h	45—90	50—100

See also part 2 of this manual.

# Turn signal and dimmer switch, emergency light switch

The turn signals are cancelled automatically after taking a corner.

The turn signals only work when the ignition is on.

When the headlight main beams are on, the blue warning lamp lights up.

The headlamp flasher only works when the parking lights are on or when all lights are off.

The emergency light system also works when ignition is switched off.

Switch on only in an emergency when vehicle is moving or when vehicle has broken down.

The regulations may differ in certain countries.

## Turn signal and dimmer switch

Lever up — right turn signals (R)  
Lever down — left turn signals (L)  
Lever in center — turn signals off (O)

### To signal a lane change

Move lever up or down until resistance is felt and hold in this position — the warning lamp must blink.

When released, the lever springs back to the central position automatically.

### Headlight dimmer and flasher

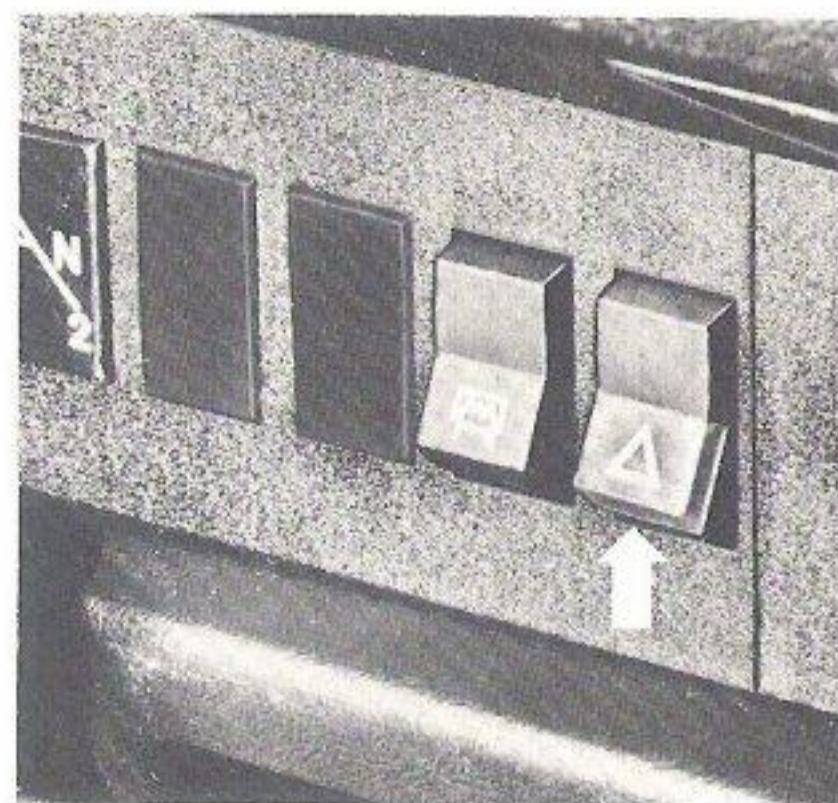
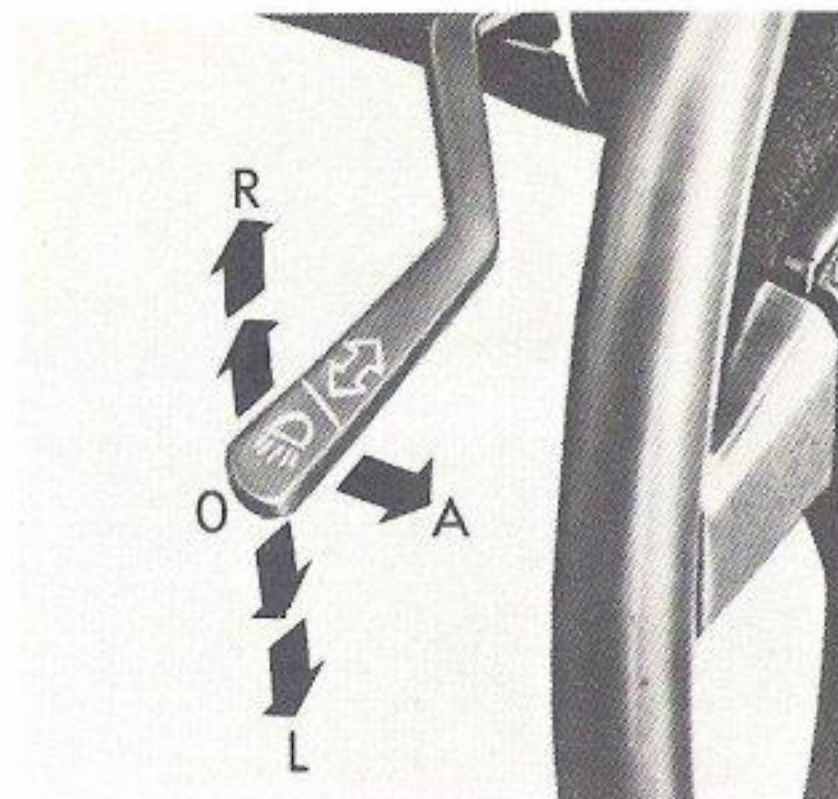
Lift lever towards steering wheel (A)

With lighting switch at:

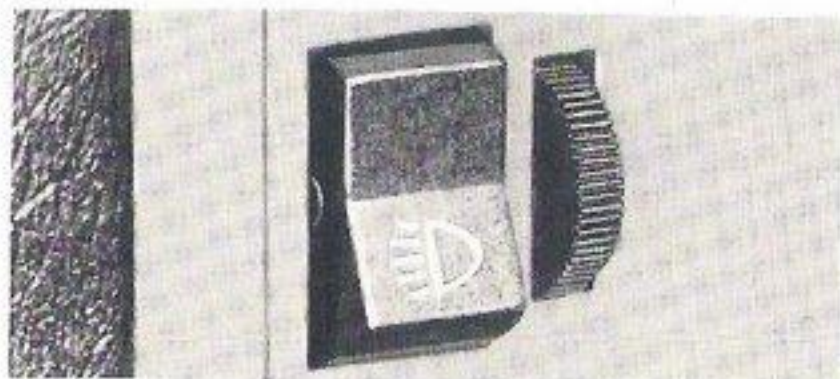
0 or 1: Headlights flash  
2: Headlight main or dimmed beams

## Emergency light switch

To switch system on — Press switch  
Warning lamp in switch flashes as well.  
The four turn signals flash simultaneously.



# Lighting switch, interior mirror, interior light



## Lighting switch

### External lights

Press switch to:

1st stop — Parking lights

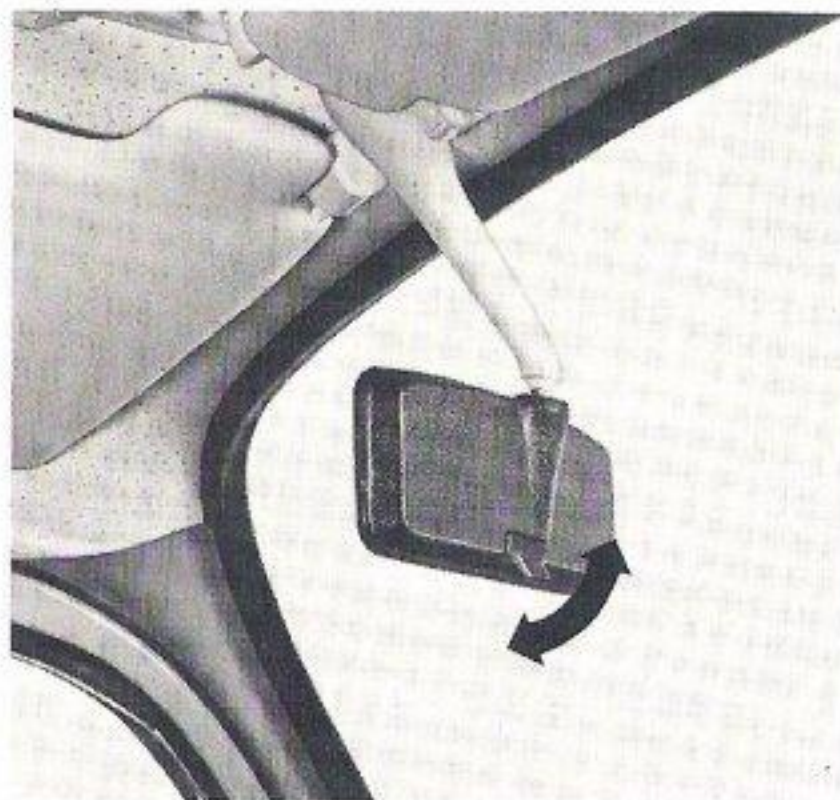
2nd stop — Driving lights

In both positions the tail lights, license plate light and instrument lights are on as well.

The headlights work only when the **ignition is on** or when the **engine is running**.

When the engine is being started and when the ignition is switched off, the headlights go out automatically.

Before setting off on a long trip always check that all lights are working properly.



## On vehicles with variable instrument lights:

To regulate brightness — Turn knurled disc

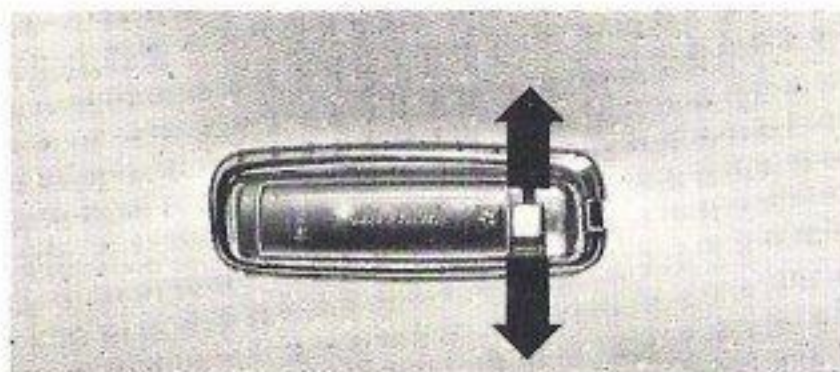
## Vehicles with anti-dazzle interior mirror

Press lever forward — normal position

Pull lever to rear — anti-dazzle position

The interior mirror springs out of the mounting on impact.

It can be installed again by pressing it in firmly.



## Interior light

Switch positions:

Top — light on only when doors are open

Center — light off

Bottom — light on all the time

On the Convertible the interior light is installed in the mirror bracket. The switch positions are:

Right — light on

Center — light off

Left — light on only when doors are open.

# Windshield wipers, washer

## On vehicles with intermittent wiper and wash-wipe device:

### Intermittent operation:

Move lever down to 4th stop — Wiper works intermittently.

The wipers work once about every ten seconds

### Wash-wipe device:

With lever in 0 position, lift it towards steering wheel — Water is sprayed on to windshield and the wipers work.

Release lever — Wipers work two or three more times.

## On vehicles with headlight washer:

When the headlights are on, the lenses are washed every time the windshield is washed.

**Note:** Before the headlights are washed for the first time, caked-on dirt and ice should be removed as before.

## Windshield wipers

Move lever:

To 1st stop — Wipers slow

To 2nd stop — Wipers fast

Lever in 0 position — Wipers off

Move lever briefly to pressure point of 1st stop — Wipers work until lever is released again.

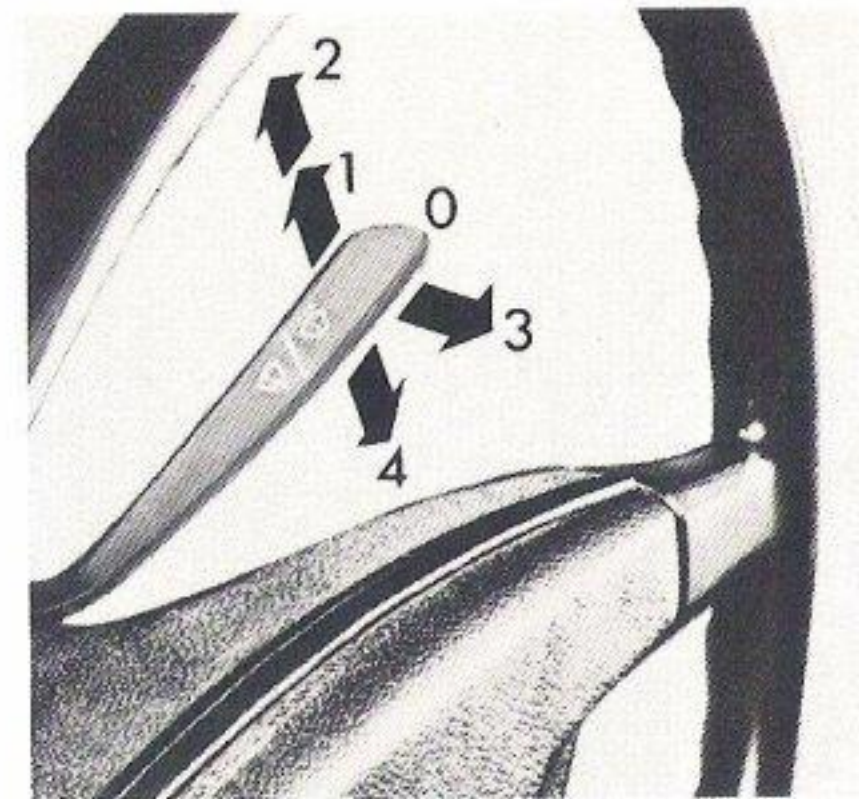
### Caution

When it is freezing, check that the blades are not frozen to the glass before switching wipers on for first time.

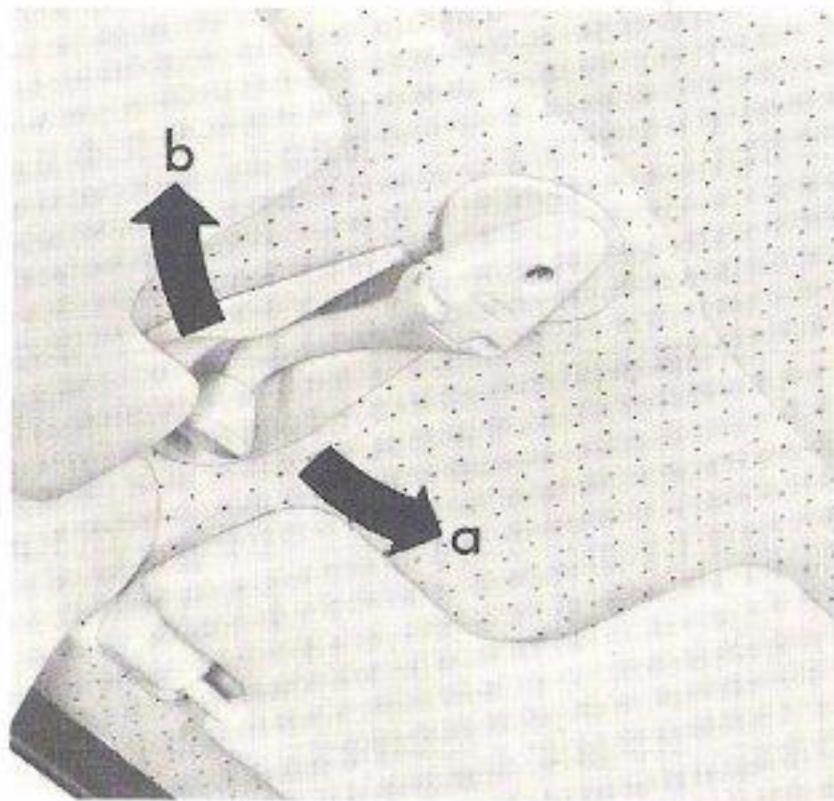
## Washer system

Lift lever towards steering wheel (3)  
Washer operates.

Water is sprayed as long as lever is held



# Sliding roof, sun visors, heated rear window



## On vehicles with sliding roof

### To open

Fold crank down and turn it anti-clockwise (a)

### To close

Turn crank clockwise (b) as far as it will go and then turn it back slightly until it can be folded into the recess.

On the sliding roof with an automatically operated wind deflector, the operation of the roof is unchanged.

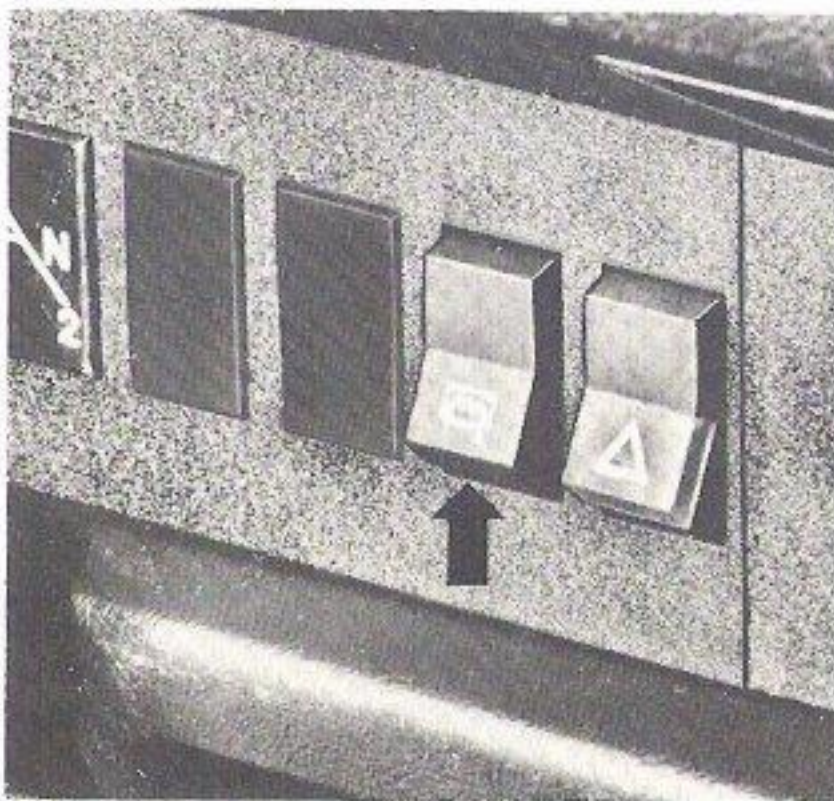
When the roof is opened, the deflector is raised automatically and is lowered in the same way when roof is closed.

**For safety reasons, the crank should always be in the recess.**

## Sun visors

The driver sun visor can be lifted out of the bracket near the mirror and swung towards the side window (not on VW 1303 A).

On the Convertible there is a make-up mirror in the front passenger sun visor.



## On vehicles with heated rear window

The window is switched on and off with a rocker switch. When switched on, a green warning lamp in the switch lights up.

As soon as window is clear, switch element off to reduce current consumption.



# Ashtrays, cigar lighter, glove box

## Ashtrays

### Ashtray in instrument panel

To empty — Press protective plate down and pull ashtray out of guides.

### Ashtray in rear (not on VW 1303 A)

To empty — Open ashtray, press it down and take it out.

To replace — Insert it at the top first and then push it in.

## On vehicles with cigar lighter

To switch: Press knob in and release it. When the knob springs out, the element is glowing. Take lighter out immediately and use it.

## Glove box

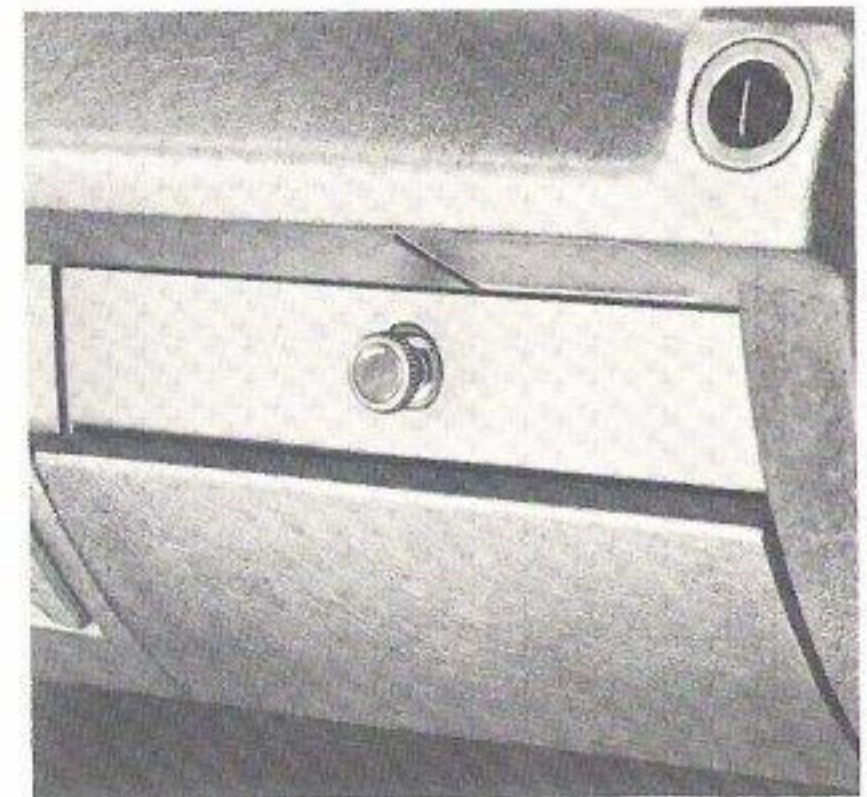
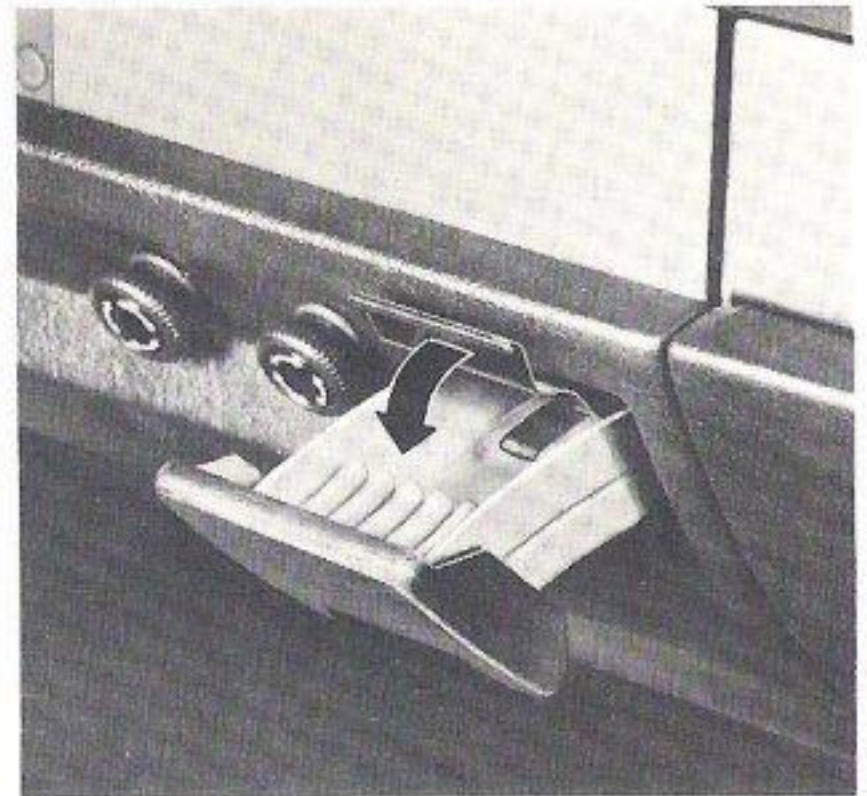
### Glove box lid

To open: Turn knob anti-clockwise

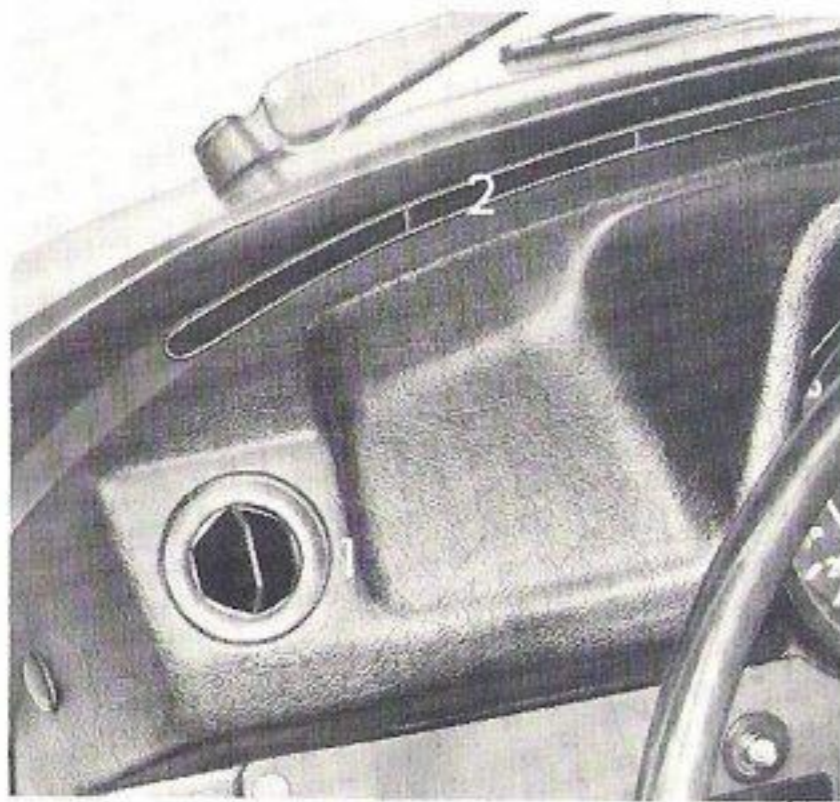
To close: Press lid to until catch engages.

If lid has lock:

To lock or unlock: Turn key anti-clockwise or clockwise.



# Fresh air ventilation



- 1 — **Adjustable mixing vents for side windows**

The air flow direction can be adjusted or the vent closed with the flap.

- 2 — **Mixing vents for windshield**

- 3 — **Fresh air outlet, adjustable**

The air deflection flaps in the grille can be moved by pushing the ribbed strip to and fro.

- 4 — **Control knobs for mixing vents 1 and 2 (Fresh air flow)**

Turning anti-clockwise — Outlets open  
Turning clockwise past the pressure point — Outlets closed.

- 5 — **Control knob for fresh air outlet 3**

Turning anti-clockwise: outlets open  
Turning clockwise (past the pressure point): Outlets closed

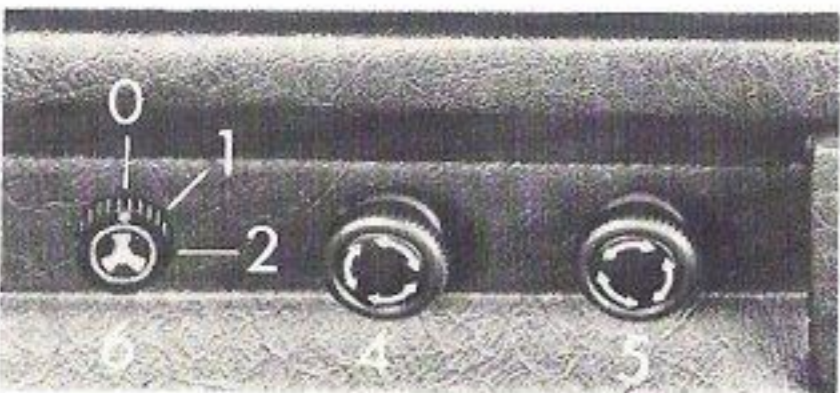
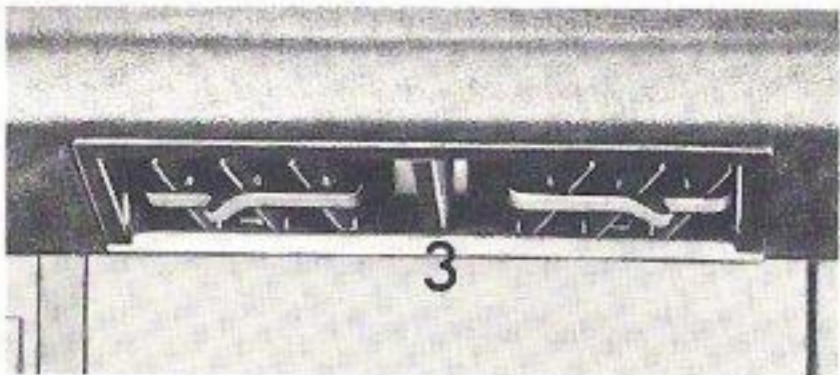
- 6 — **Switch for fresh air fan**

Position 0 - Fan off  
Position 1 - Fan slow  
Position 2 - Fan fast

The fresh air is circulated by the ram effect of the wind caused by the movement of the vehicle. Even when all the windows are closed, the body is ventilated properly as the stale air can escape through the slots behind the rear side windows.

When heating is turned on, warm air flows from mixing vents 1 and 2 (see next page).

The fan circulates the air properly when driving slowly or standing still.



# Heating

When heating is on, warm air flows from the mixing vents for the windshield and the mixing vents for the side windows (see previous page)

## To defrost windshield quickly

- Pull lever (1) up
- Push lever (2) down
- Push lever (3) for front footwell vents forward.
- Close fresh air vents
- Keep mixing vents for side windows (see previous page) closed until ice on windshield has thawed, then
- Open mixing vents for side windows

As soon as the ice on the side windows has thawed, switch on the fresh air as well so that the glass dries quickly. When the windshield is clear, open the footwell vents so that the body heats up uniformly.

## 1 — Heating lever

Lever up — Heating on  
Lever down — Heating off.

## 2 — Lever for warm air vents in rear footwell

Lever up — Footwell vents open  
Lever down — Footwell vents closed.

## 3 — Levers for warm air vents in front footwell

(on side members in front of front seats)  
Levers to rear (a) — vents open  
Levers forward (b) — vents closed



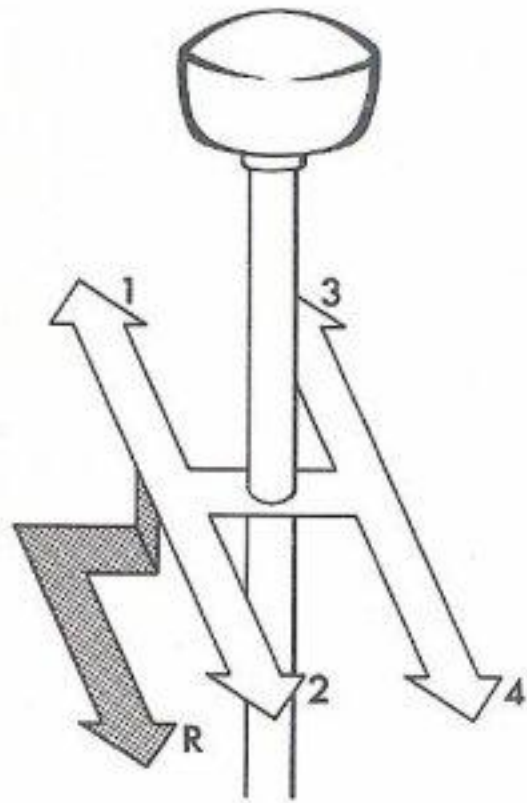
# Gearshift lever, handbrake

## Gearshifting

Shift into reserve gear only when the vehicle is standing still. To engage reverse, press lever down firmly, move it to the left and pull it back to the stop.

The shift pattern for the selector automatic is shown on page 32.

The back-up lights come on when reverse gear is engaged.



## Handbrake

To release:

Pull lever up slightly first, press the locking knob in and move lever down fully.

On vehicles with a brake warning lamp, the lamp in the instrument panel which comes on when the ignition is switched on should go out when the handbrake is released (see page 22).

# Refueling, windshield washer container

## Refueling

- Open the flap.
- Screw the tank filler cap off anti-clockwise.
- After refueling replace the filler cap and screw it in clockwise until it clicks.
- Close the flap.

Fuel: Branded fuels

minimum octane rating 1.2 liter engine 87 RON  
1.3 and 1.6 liter engine 91 RON } Regular

\* If regular fuel with adequate anti-knock properties is not available use premium fuel or a mixture.

## Fuel capacity

Fuel gauge, see page 10.

The fuel tank has an additional expansion volume of about 5 liters.

The tank capacity is approx. 42 liters of which about 5 liters is reserve.

It is full when the fuel level reaches the filler neck.

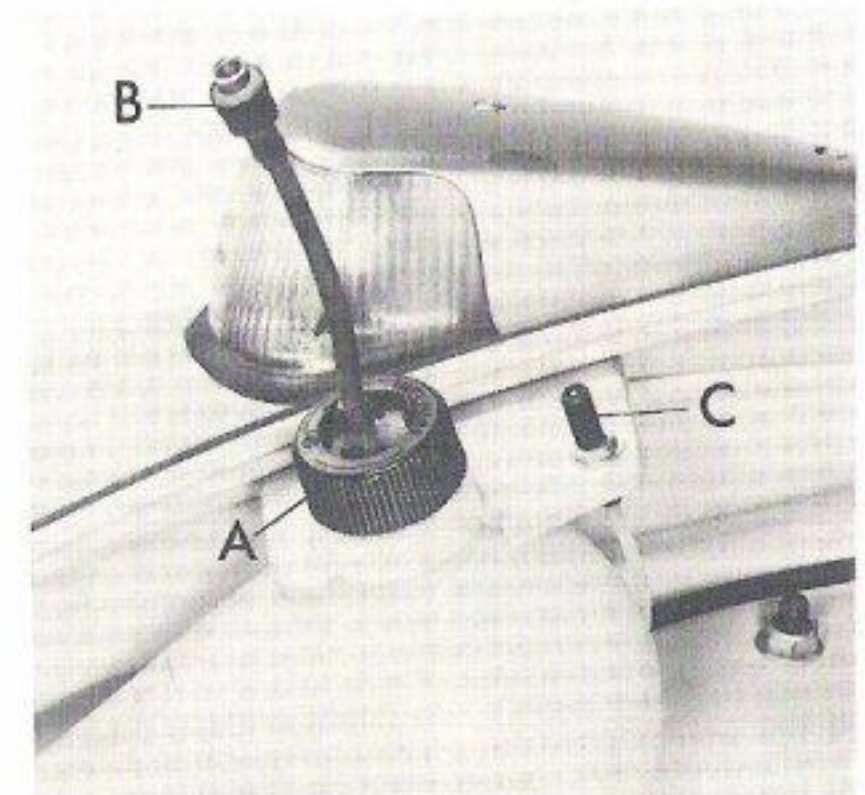
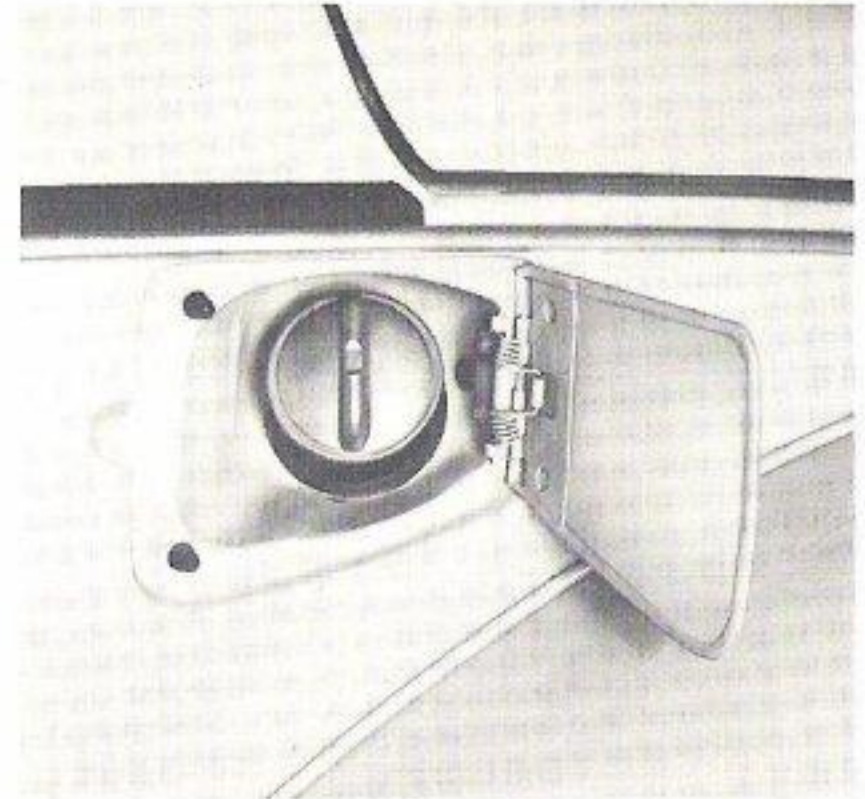
## Windshield washer container

- Take screw cap (A) off, fill container until it overflows (about 2 liters, or 8 liters on vehicles with headlight washers) and screw cap back on.

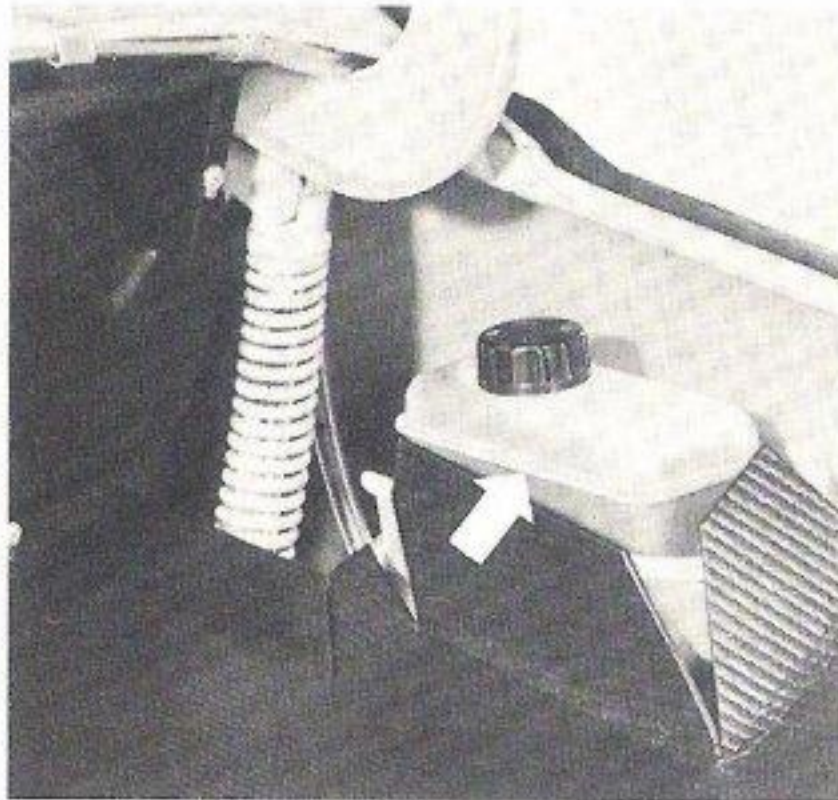
A window cleaning fluid should be added to ensure that the windshield is properly cleaned. If enough of this fluid is put in it also acts as an anti-freeze.

On vehicles without headlight washer the spare wheel supplies the air pressure for the windshield washer. The spare wheel remains usable at all times because a special valve cuts off the air flow to the washer when the pressure drops to 2 kg/cm<sup>2</sup>. If the washer stops working or the water jet is too weak, the valve may have worked. Check and inflate to correct pressure if necessary.

- Remove valve cap (B), inflate spare wheel via valve (C) to 3 kg/cm<sup>2</sup> and screw cap on again tightly.



# Brake fluid reservoir, engine oil level



## Brake fluid reservoir

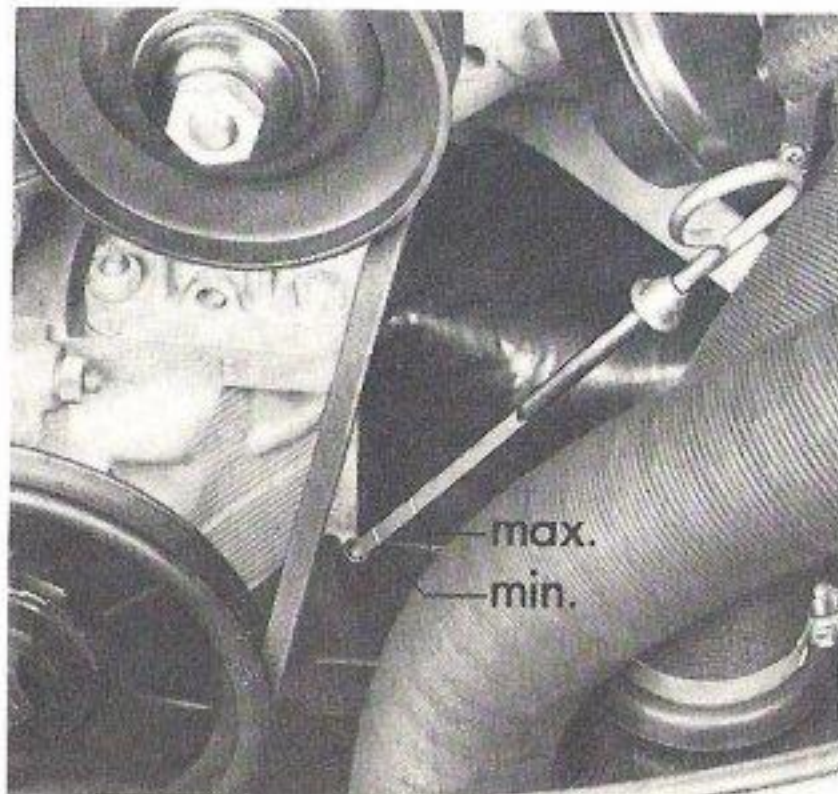
The fluid should always be level with the ridge round the reservoir. If the level drops noticeably below the joint when the vehicle has been in use for some time — see your VW workshop.

Caution: The brake fluid is hygroscopic and must be changed every two years. In order to ensure that this is done properly, see your VW Dealer.

Use only fresh (unused) brake fluid to US FMVSS 116 DOT 3 specifications when topping up the system. VW brake fluid fulfils these specifications and is available at all VW dealerships.

### Caution

Brake fluid is corrosive and will damage the paintwork.



## Engine oil level

- Place vehicle on a level surface.
- Switch engine off and wait at least 5 minutes to give the oil time to drain down to the bottom of the crankcase.
- Pull dipstick out and wipe it with a clean cloth.
- Push dipstick in fully again, pull it out and check the level.

The oil level must be between the two marks on the dipstick and must never be below the lower mark. Add engine oil if necessary (see part 2 of instruction manual).

Difference in amount of oil between the upper and lower marks is **1.25 liters**.

# Starting the engine

## With manual transmission:

- Make sure gear lever is in neutral.

## With selector automatic:

- Selector lever at "N".

## At temperatures above freezing point (1)

- Depress accelerator pedal slowly while operating the starter.

## At temperatures below freezing point (2)

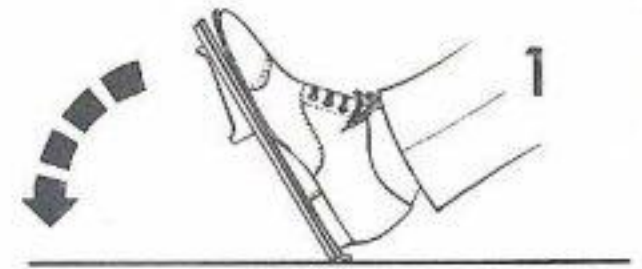
- Before operating starter, depress accelerator pedal fully once and let it return slowly — this actuates the automatic choke.
- Depress clutch pedal.
- Switch ignition on and start engine **immediately**.

## When engine is warm (3)

- Depress accelerator pedal fully while operating starter but do not "pump" the pedal.

## Note:

- As soon as engine starts, release the ignition key so that starter is switched off.
- Do not try to warm the engine up by letting it idle — drive off **straightaway** but do not over-rev the engine while it is still cold.



## Starter non-repeat lock

Before starter operation can be repeated, the ignition must be switched off. A non-repeat lock in the ignition switch prevents the starter from being operated and possibly damaged when the engine is running.

**Be careful when running the engine in a confined space. Danger of poisoning.**

## Warning lamps

The warning lamps which come on when ignition is switched on, should go out when the engine is started, the warning lamp for the handbrake, however, goes out only after the handbrake is released.

### If the generator warning lamp comes on when driving:

- Stop at once and check V belt or fuse No. 12 in fuse box.
- When the belt is broken, the engine is not cooled at all. Do not drive on until a new belt has been fitted. For details of belt size and tension, see page 41.
- If the generator has stopped charging for some other reason, take car to the next VW workshop because the battery will soon be run down.
- If the fuse is blown, the turn signals are out of action. Fit a new fuse. If the fuse blows again, do not drive on, get workshop assistance.

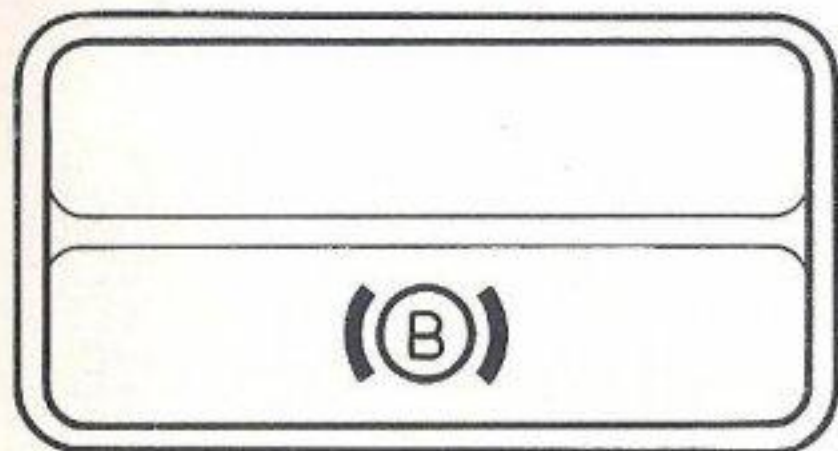
### If the engine oil pressure warning lamp comes on or flickers when driving:

- Stop at once. Check oil level — see page 20.
- If cause of trouble is not apparent, get expert assistance immediately.

Occasional flickering of the warning lamp when engine is idling after a long spell of fast driving does not indicate trouble as long as lamp goes out when engine speed increases.

### If the brake warning lamp comes on when the brake pedal is depressed:

- One of the two hydraulic brake circuits may have failed. Drive carefully to the nearest VW workshop. **Caution** The pedal will require more pressure and the stopping distances will be longer. To check operation of warning lamp:
    - Switch ignition on — Lamp should light up.
    - Start engine — Lamp should go out straightaway or when the handbrake is released.
- If the lamp does not come on when ignition is switched on or go out when the engine has been started and the handbrake released, there is a fault in the electrical system. See your VW Dealer.





# Luggage compartments

## A tip when stowing luggage:

Whether you have a lot of luggage with you or not, always put the heaviest pieces of luggage in the front compartment first before using the space behind the rear seat.

## Roof rack

An additional 50 kg of luggage can be carried on a roof rack when necessary.

- The roof rack must have supports which are supported in the rain channel. The racks offered in the VW accessory programme are of this type.
- The load on the rack must be distributed evenly.

## Front luggage compartment

To unlock —

Pull lever in glove compartment down. The lid springs up slightly under spring pressure.

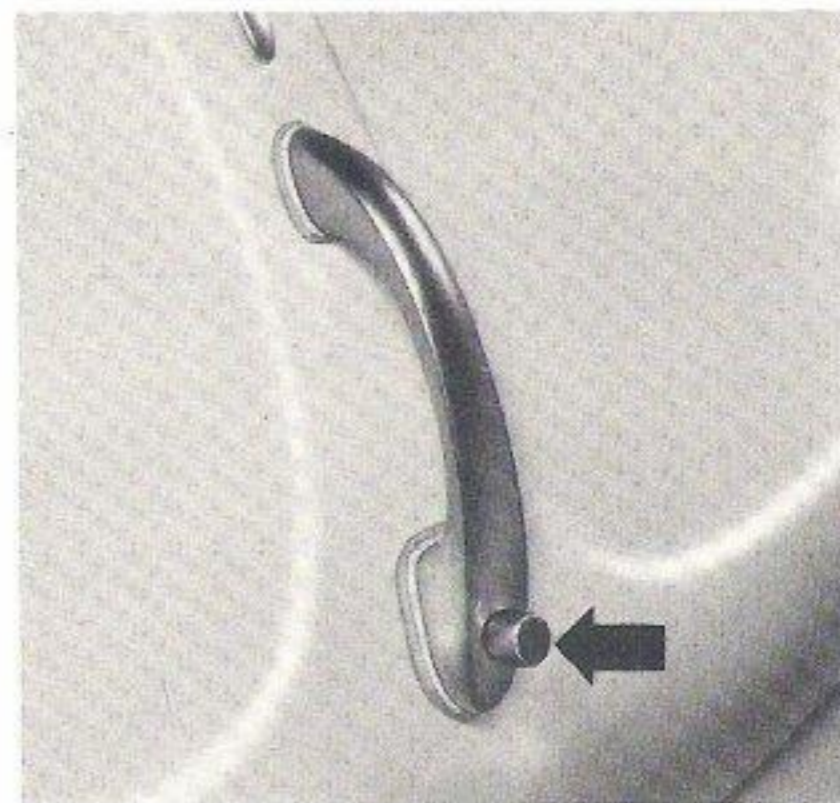


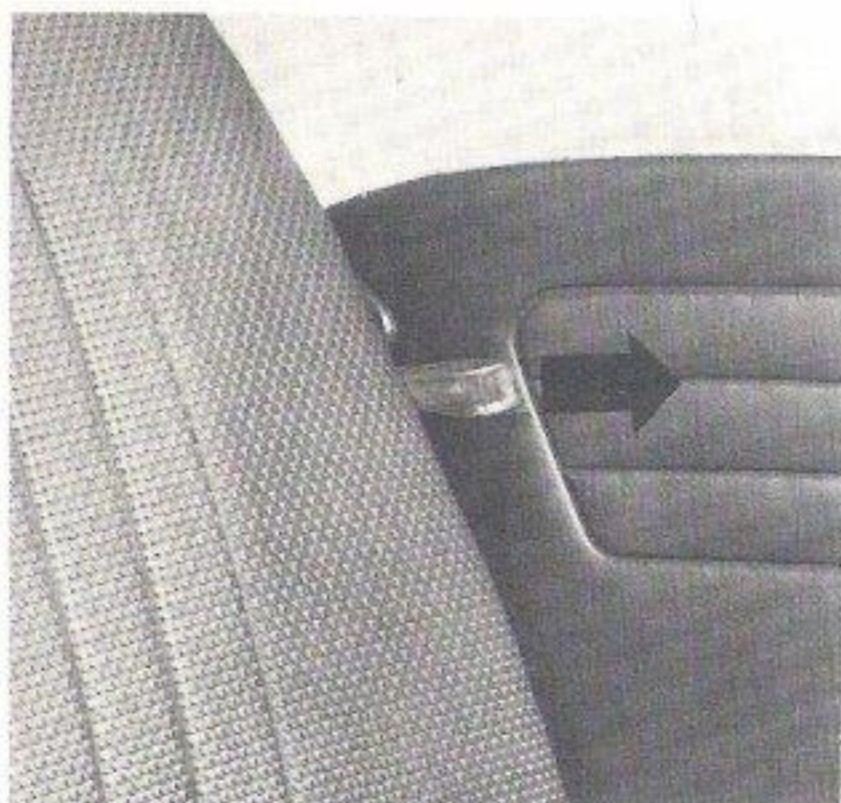
To open hood —

Press up the button on the safety hook under the hood and lift the hood. The hood is spring-loaded so that it stays up.

To close hood —

Press hood down firmly until you hear a click.



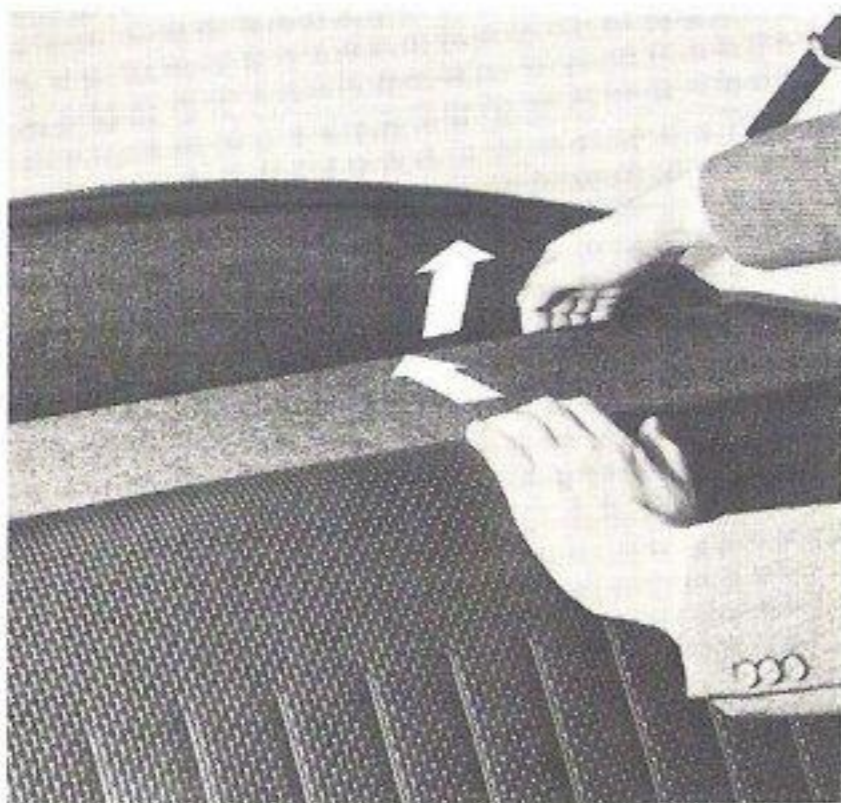


## Rear luggage compartment

### Rear seat backrest

To release — Pull the loop at the side of the seat.

To lock — Just push backrest to the rear and lock will engage automatically.



### On vehicles with luggage compartment cover:

#### Luggage compartment cover

To close — Release backrest lock and pull backrest forward slightly and at the same time lift the cover with one hand as far as it will go. Then push backrest slowly to the rear.

To open — Release backrest lock and pull backrest forward until cover drops down of its own accord.

The rear luggage compartment is more easily accessible when the backrest is hinged forward.

Luggage in the rear compartment is concealed when the cover is closed.

#### Caution

Do not stack luggage too high in the rear compartment, otherwise:

- Suitcases etc. will be thrown forward when the brakes are applied sharply.
- The heater element in the rear window can get damaged.
- The view to the rear is obstructed.

The rear luggage compartment can be enlarged by folding the backrest forward.

**Caution**

Stow luggage so that it cannot be thrown forward when the brakes are applied sharply.

**Enlarging rear luggage compartment**

**To secure backrest with strap**

Hinge backrest forward, press it down slightly and hook the strap into the seat support.

**To release strap**

Press backrest down slightly to relieve tension on strap and detach the hook.

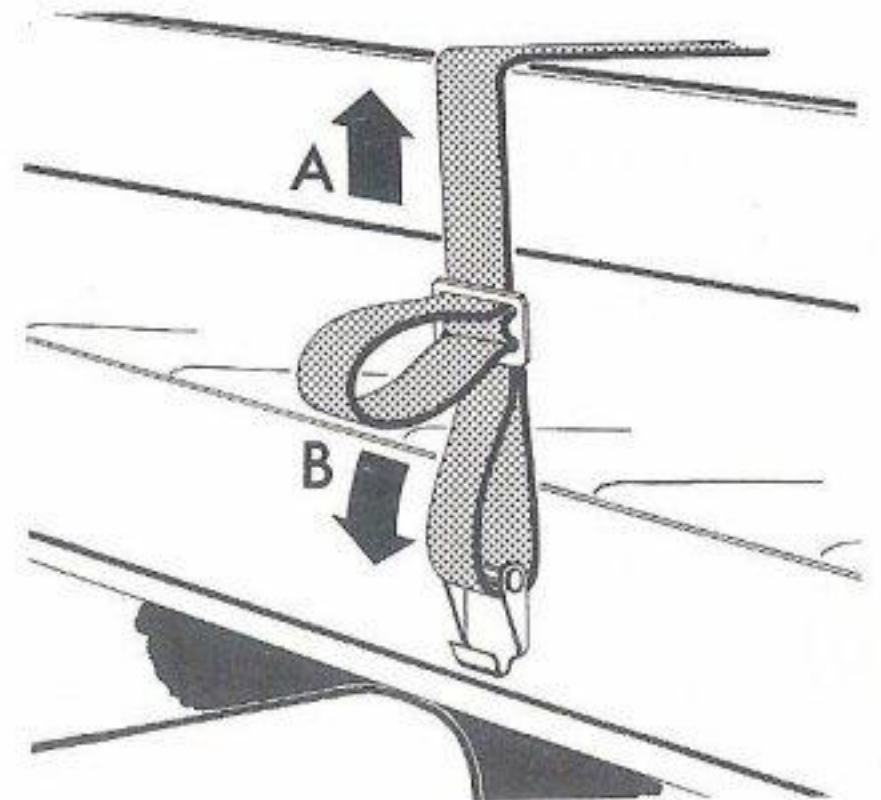
**To adjust strap**

Pull strap forward out of buckle a little way. Pull strap up or down through the buckle:

Pulling strap up (A) — Lengthens strap

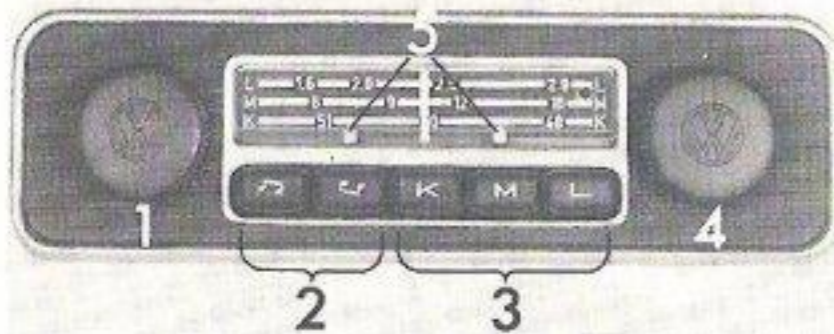
Pulling strap down (B) — Shortens strap

The strap can only be adjusted when it is unhooked. The strap length is correct if the hook can be attached easily when backrest is hinged forward and pressed down. The strap should then be under a slight tension.



# Radios

"Wolfsburg"



1 — Rotary knob: On — off and volume

2 — Press buttons for tone control

Left button — bass  
Right button — treble

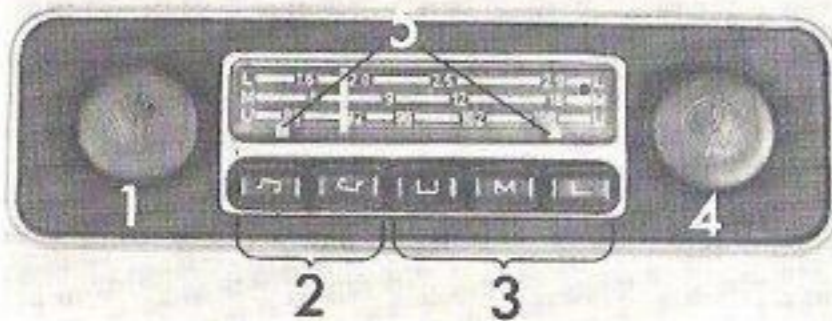
3 — Press buttons for wavebands:

U = VHF  
K = Short wave  
M = Medium wave  
L = Long wave

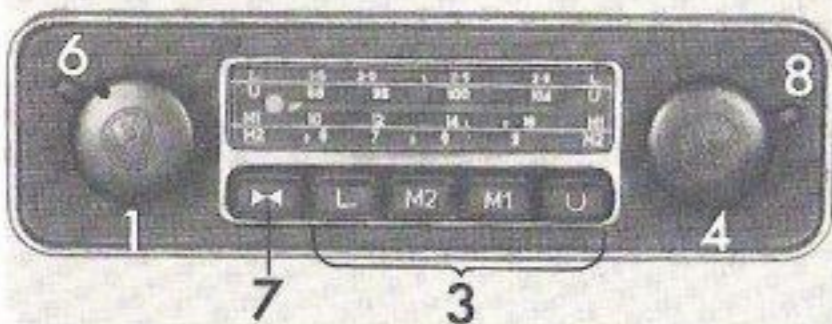
4 — Rotary knob for tuning

5 — Station markers

"Emden"



"Hannover"

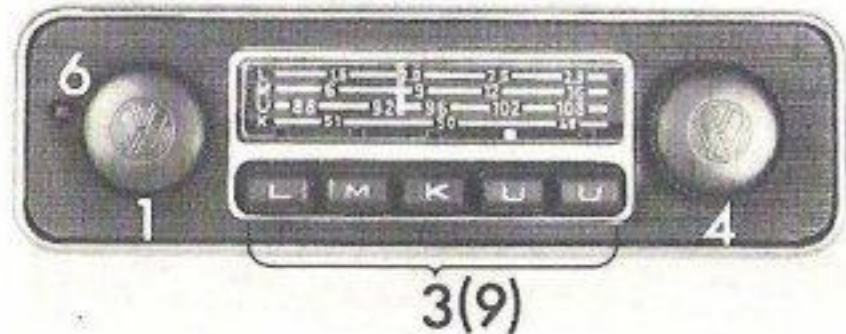


6 — Rotary switch for tone control  
down — bass  
up — treble

7 — Press button for automatic station  
seeker \*

8 — Rotary switch for station seeker sensi-  
sitivity  
up — powerful stations only  
down — all stations

"Ingolstadt" (mono)



9 — Station press buttons \*\*

## \* Automatic station seeker ("Hannover")

Pressing this button starts the automatic station seeker which then tunes in to the nearest station (according to position of sensitivity switch) on the selected waveband.

If button is pressed again, the station seeker tunes in to the next nearest station. When the waveband is changed, the last station selected by hand on the previous waveband remains tuned in.

## \*\* Station press buttons ("Ingolstadt")

make it possible to pre-set a station on the waveband concerned. Tune in station exactly with rotary knob (4). Pull button out and press it again. This sets the station to this button so that it can be selected again by just pressing the button. The button can be set to another station at any time.

All sets have a socket for a **tape recorder** and a connection for an **automatic aerial** at the back.

The "Hannover" set also has a socket for a **station seeker remote control**.

### **Care of aerial**

From time to time after washing the vehicle, the aerial should be wiped dry and coated lightly with chrome grease. When dry and dirty, the aerial becomes stiff and is then liable to bend when being pushed in.

### **Fuse in radio connecting cable**

Use only a 2 ampere fuse (VW Part No. 111 035 307) in the radio connecting cable.

### **VHF reception**

In built-up areas and in hilly districts the VHF reception can often be of poor quality.

### **Radio license**

If local regulations require it, do not forget to obtain a radio license before using your car radio.

# Seat belts

## Belt anchorages for front seats:

- Upper outer point (a) —  
at top of lock pillar
- Lower outer point (b) —  
at bottom of lock pillar
- Lower inner point (c) —  
on frame tunnel in rear footwell



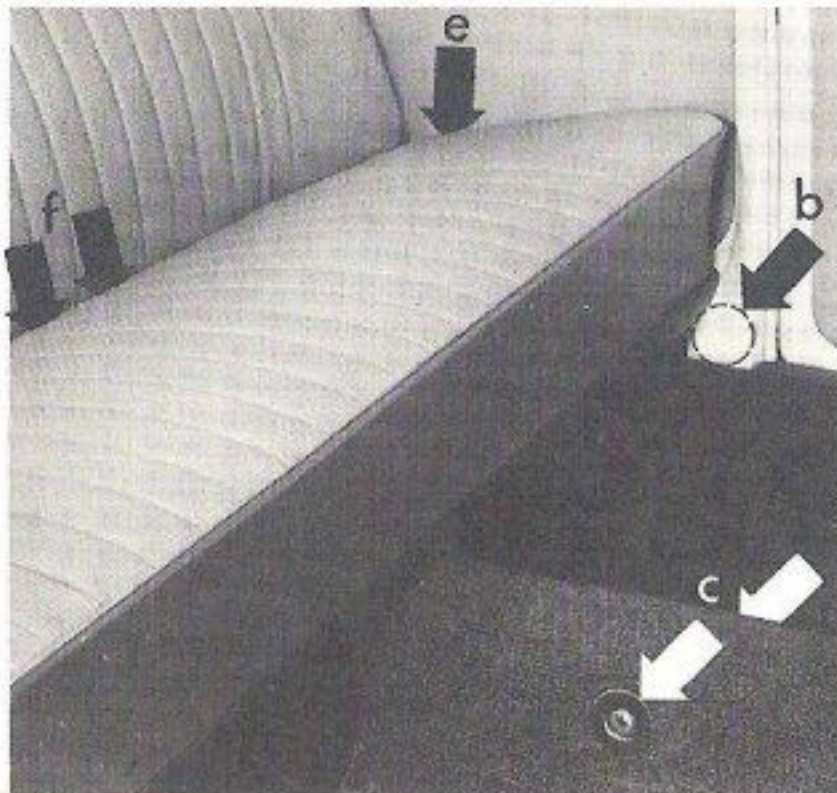
The front seats and the two outer places on the rear seat can be fitted with shoulder or lap belts or combined shoulder/lap belts.

The tapped holes marked with circles in the illustrations are covered by the headlining. The holes must be uncovered when installing belts. The plastic plugs in the holes in the lower part of the body must not be used to secure the belts.

Service installation of seat belts should preferably be done by a VW workshop.

## Belt anchorages for rear seats:

- Upper outer point (d) —  
on roof member behind rear side window
- Lower outer point (e) —  
on floor panel under seat
- Lower inner point (f) —  
in center of floor panel under seat



Instructions on the use and care of seat belts are given in part 2 of this manual.

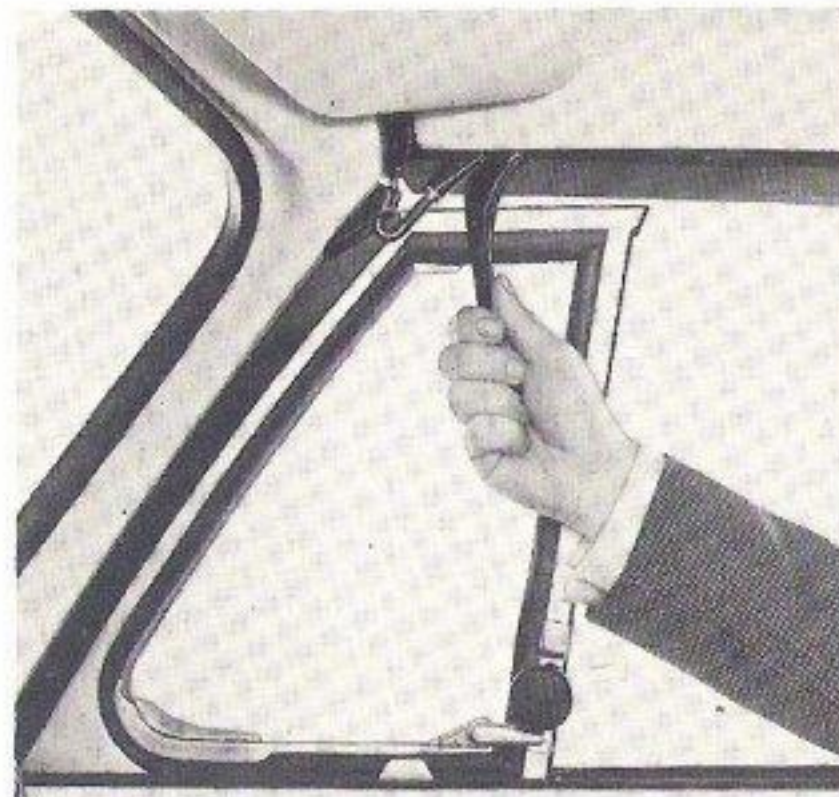
## Convertible top

Open the top only when it is dry and clean because sharp particles of grit can damage the top material.

### To open top

Swing down the two locking levers at the front above the vent wings, disengage the hooks, fold levers against the top and lay top to the rear. Press top linkage together until the small side catches engage. **Ensure that the padding does not get jammed under the linkage.**

Pull boot over top from rear to front and secure it with the press buttons and eyes.



### To close top

Wind rear side windows down and take protective boot off. Press top down slightly and unhook the catches. Fold the top forward and pull the locking levers down. From inside the vehicle, pull the top down on to the windshield frame, engage the retaining hooks and tension the top by swinging the locking levers to the rear.



\* The tonneau cover provides a practical means of keeping the vehicle interior clean when the top is open. It also protects the vehicle from petty thieves when it is parked with top open: Tonneau covers are available as an optional extra and also subsequently as a VW part.

Before fitting a **tonneau cover**\* on a vehicle with headrests, the front seats and backrests must be moved as far to the rear as possible as otherwise the tonneau cover will not fit properly.





# Selector Automatic

The Selector Automatic transmission consists of a normal fully synchronized three-speed gearbox which is connected to the engine via a hydrodynamic torque converter. Between converter and gearbox is a vacuum operated clutch which automatically interrupts the power flow from converter to gearbox when a driving range is being selected.

The clutch pedal has been dispensed with and the brake pedal has a wide plate so that the brakes can also be applied with the left foot. A selector lever in the frame tunnel takes the place of the gearshift lever.

## Basic driving rules

- **When moving off, always apply footbrake or handbrake before selecting a driving range.**

Reason: The torque converter, which also serves as a moving off "clutch", always transmits a certain amount of power even when the engine is only idling. This means that the vehicle tends to move slowly or "creep" as soon as a driving range is selected. This tendency is stronger, the higher the engine speed is.

- **Do not keep accelerator down when changing a driving range — wait for engine speed to drop to idling.**
- **When vehicle is in motion, touch the selector lever only to change the driving range.**

Reason: When a range is selected the power flow between engine and gearbox must be interrupted. This is done by a shift clutch which disengages automatically when the lever is moved in the direction of a driving range. If the lever is touched when the vehicle is in motion and moved accidentally, the clutch disengages immediately. This makes the engine race as the load is taken off and — when the lever is released — puts an excessive strain on the clutch as it is engaged suddenly. The same strain is created when a driving range is selected with accelerator down.

## Description

The selector lever has 6 positions:

L } Forward driving ranges  
1 }  
2 }

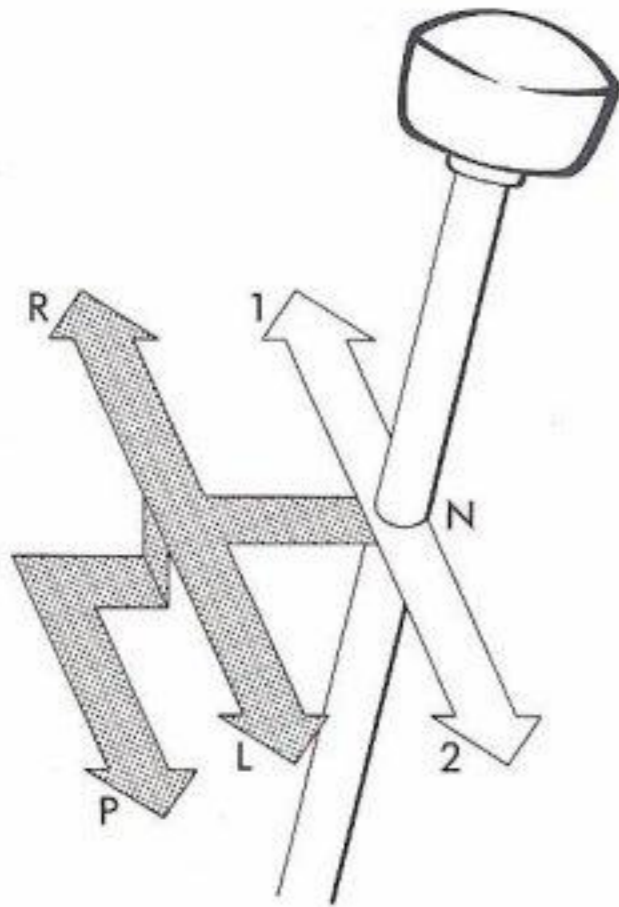
R — Reverse

N — Neutral

P — Parking lock

When in neutral, the lever is always between driving ranges 1 and 2. To select driving ranges L and R, the lever must be pressed to the left first.

To engage the parking lock, the lever must first be moved to the left against the spring pressure and pressed down. It is then moved to the left as far as it will go and pulled to the rear.



### Lever position "L":

The "low" range covers speeds from 0 to 55 km/h (50 km/h\*). It is used for steep gradients with vehicle fully loaded or towing a trailer. It is also used when driving very slowly over difficult terrain. This range is not used very often.

### Lever position "1":

This range is for moving off and accelerating and covers speeds from 0 to about 90 km/h (85 km/h\*). It is the correct range for dense urban traffic, medium gradients, slow moving columns of vehicles and when maximum acceleration is required for overtaking.

### Lever position "2":

This range, which covers speeds from 0 to top speed is for the open road. It can also be used in free flowing town traffic at relatively low speeds without being detrimental to the transmission. However, where the traffic calls for constant changes in speed or even stopping, starting and accelerating, the lever should be moved to "1" in good time.

\* Figures in brackets are for the 1.3 liter engine

**Lever Position "R":**

This range may only be selected when vehicle is stationary and engine is idling.

**Lever position "N":**

This is the normal neutral position as on an ordinary gearbox.

**Lever position "P":**

In position "P" the rear wheels are mechanically blocked. The parking lock should only be engaged when the vehicle is stationary. (See also "Driving Instructions" — Parking)

**Driving instructions****Starting**

The engine can only be started when selector lever is at "N". (Other points on starting are as given on page 21).

**Moving off**

Normally, the lever should be at "1" when moving off. Release lever as soon as range has been selected (see remarks on page 31).

**Stopping and moving off again**

To stop vehicle temporarily such as at traffic lights, all that is necessary is to apply the brakes. It is not necessary to move the lever to "N" while stationary. The engine should only be run at an idling speed and the vehicle held with the brakes.

If the vehicle is not fully loaded, not on a gradient and rapid acceleration is not required, it is quite in order to move off with lever in position „2“. Otherwise, it is advisable to move the lever — as with a normal gearbox — to "1" before moving off.

### **Driving in mountains**

For mountain driving, the lever positions should be selected — as with a normal three speed gearbox — to suit the gradient and keep the engine running in the best torque range. In order to make effective use of engine braking when going downhill, the lower ranges "1" or "1" should be selected as necessary.

### **Parking**

Basic rules:

- Engage the parking lock **after** applying the handbrake.
- Release the parking lock **before** releasing the handbrake.

When it is freezing, it is advisable to use only the parking lock to secure the vehicle because the brake shoes can freeze on to the drums when the handbrake is applied.

### **Note:**

When a vehicle has been parked on a gradient, using only the parking lock, it may be found that a fair amount of force is required on the lever to release the parking lock. This is caused by the load on the parking lock mechanism and is quite normal.

### **Emergency starting**

If the battery is flat, the vehicle can be started by towing:

- Selector lever at "L"
- Towing speed about 25 km/h

It cannot be started by getting helpful people to push it. The torque converter power flow at a walking pace is not sufficient to turn the engine over.

### **Towing**

With the lever at "N" the vehicle can be towed without speed or mileage restrictions.

## Trailer towing

The instructions on "Trailer towing" in part 2 of the instruction manual apply without exception to towing a trailer with an "automatic" vehicle.

The following points should, however, be noted:

- Always move off with lever at "L" and do not move to "1" until a speed of at least 35 km/h has been reached.  
Reason: The fluid in the torque converter can get too hot if the vehicle moves off in too "high" a range and the next range is selected too early because an excessive amount of slip occurs in the converter for a prolonged period.
- For long downhill stretches the L driving range should be selected in order to get maximum benefit from engine braking and relieve strain on the brakes. If the gradient is only slight, sufficient braking effort may possibly be obtained in range "1".
- It is bad practice to hold the vehicle and trailer on a gradient by leaving a gear engaged and using the accelerator instead of applying the footbrake or handbrake.  
Reason: The fluid in the converter would then heat up very quickly and this can cause damage to the oil seals in the transmission.

## Warning lamp in instrument panel

As the converter fluid can overheat due to the additional strain on the transmission caused by trailer towing — particularly if certain driving mistakes are made — vehicles fitted at the factory\* with a towing bracket are also equipped with a warning lamp in the instrument panel. This lamp comes on in good time when the fluid heats up excessively so that the driver can take certain measures to prevent the temperature the instrument panel. This lamp comes on in good time when the fluid heats up from rising still further:

\* The lamp must also be fitted when a towing bracket is service installed. The workshops in the VW Organization have been informed of this.

- If the warning lamp comes on in the driving range "2", the range "1" must be selected immediately. If it comes on in range "1" the "L" range must be selected at once. The temperature of the fluid usually goes down quickly as the fluid is cooled more intensively by the faster circulation. The lamp will then go out shortly afterwards.
- However, if the warning lamp does not go out when the lever is in position "L", stop the vehicle at the next opportunity. Keep the engine running at an idling speed with selector lever at "N" as this helps to cool the fluid quickly. When the lamp goes out, wait a while before driving on.

#### **Additional fuses**

The control valve for the automatic gearshift clutch is wired via an 8 A. fuse which is located in the fuse box (Fuse No. 11). If the driving ranges cannot be selected at any time it may be found that this fuse has blown.

# Data

Numerous European countries are starting to use the new international units for technical measurements

Examples of these units are as follows:

	Old unit	New unit	Remarks
Output	bhp	kW (kilo-watt)	1 bhp = 0.736 kW
Torque	lb. ft.	Nm (Newtonmeter)	1 lb. ft. = 1.38 Nm*
Revolutions	rpm	1/min**	new way of writing
Air pressures	psi	bar	1 psi = 0.07 bar

\* exactly: 1.36 Nm

\*\* for example 2700/min

# Technical Data

## Engine

4 cylinder, 4 stroke, horizontally opposed engine at rear ● Air cooled by fan ● Pressure oil feed by gear type pump, with oil cooler, cleaned by strainer ● Mechanical fuel pump ● Downdraft carburetor with automatic choke and accelerator pump ● Paper type air cleaner (1.2 liter engine with oil bath air cleaner).

Engine data	1.2 liter engine	1.3 liter engine	1.6 liter engine
Bore (mm)	77	77	85.5
Stroke (mm)	64	69	69
Capacity (cm <sup>3</sup> )	1192	1285	1584
Compression	7.0	7.5	7.5
Maximum output in kW (bhp)-(DIN 70020)	25 (34) at 3600 rpm	32 (44) at 4100 rpm	37 (50) at 4000 rpm
Maximum torque in Nm (lb. ft.)-DIN	84 (61) at 2000 rpm	88 (64) at 3000 rpm	108 (78) at 2800 rpm
Fuel consumption in liter/100 km (DIN 70030)*	7.5	8.8 (9.2**)	9.2 (9.6**)
Fuel rating (RON Res F 1)	87	91	91
Oil consumption in liter/1000 km	0.3 — 1.0	0.5 — 1.0	0.5 — 1.0

\* see part 2 of instruction manual

\*\* with selector automatic

## Power transmission

### with manual transmission:

Single plate dry clutch (Clutch pedal free play 10—20 mm) ● Baulk synchronized four-speed gearbox and final drive in one housing.

### with selector automatic:

Hydrodynamic torque converter, baulk synchronized three-speed gearbox and final drive in one housing

## Body and chassis

All-steel body bolted to chassis frame ● Center tube frame with front frame head and frame fork at rear.

### Front axle, steering

Independent suspension ● Suspension struts connected to frame head by track control arms ● Coil springs ● Stabilizer ● Worm and roller steering.

### Rear axle

Double joint axle located by longitudinal and diagonal links ● Torsion bars.



## Brakes

Footbrake: Hydraulic dual circuit system ● Drum brakes (On request: disc brakes at front) ● Handbrake: Mechanical, effective on rear wheels.

Chassis data		With normal wheels		with sports wheels	
Wheelbase (mm)		2400		1407	
Front track (mm)		1394		1363	
Rear track (mm)		1349		11	
Turning circle (m)		11			
<b>Wheels and tires</b>					
Wheels		Steel, perforated disc, drop center rims with double hump			
Size		4 1/2 J × 15		5 1/2 J × 15	
Offset (mm)		41		26	
Tires: Cross ply		5.60 — 15 4 PR or 6.00 — 15 4 PR		—	
Radial ply		155 SR 15		175/70 SR 15	
<b>Tire pressures</b>		Cross ply		Radial ply	
with		front	rear	front	rear
1 or 2 occupants	bar (psi)	1.1 (16)	1.9 (27)	1.3 (18)	1.9 (27)
3 to 5 occupants	bar (psi)	1.3 (18)	1.9 (27)	1.3 (18)	1.9 (27)

The pressures should be increased 0.2 bar (3 psi):

- When using winter tires (cross and radial ply)
- When driving at high speeds for long periods. (cross ply only)

The pressures given in table are for cold tires.

**Electrical system**

12 Volt

Battery	Ah	36
Starter	kW (hp)	0.5 (0.7)
with selector automatic	kW (hp)	0.59 (0.8)
AC generator with voltage regulator	W	700
Spark plugs		Bosch W 145 T 1, Beru 145/14, Champion L 88 A or plugs with similar values from other manufacturers. light, front

Plug thread size      mm 14  
Electrode gap          mm 0.7

If the vehicle is to be driven at full speed for prolonged periods in areas where the ambient temperature is above 25 ° C, it is advisable to fit spark plugs with the next higher heat value such as Bosch W 175 T 1, Beru 175/14 for example.

**Bulb chart** (V = volts, W = watts)

Bulb for	DIN designation	VW Part No.	Type
Headlight (normal)	A 12 V 45/40 W	N 17 705 3	Twin filament ball
Headlight (Halogen)	YD 12 V 60/55 W	N 17 763 2	Halogen H 4
Parking light	HL 12 V 4 W	N 17 717 2	Tubular
Turn signal	RL 12 V 21 W	N 17 732 2	Ball
Brake-tail light	SL 12 V 21/5 W	N 17 738 2	Twin filament ball
License plate light	G 12 V 10 W	N 17 719 2	Ball
Interior light	K 12 V 10 W	N 17 723 2	Festoon
Back-up lights	RL 12 V 21 W	N 17 732 2	Ball

**Bulbs for vehicles with Sealed-Beam headlights differ as follows:**

Headlight	6012 (US)	111 941 261/A	Sealed-Beam
Turn signal front with parking light	SL 12 V 21/5 W	N 17 738 2	Twin filament ball
<b>For vehicles with US equipment:</b>			
Headlight	6014 (US)	111 941 261 B/C	Sealed-Beam
Side marker light, front (additional)	HL 12 V 4 W	N 17 717 2	Ball

It is always advisable to carry a box of spare bulbs in the car. These can be obtained from any VW workshop.

<b>Vee belts</b>	1.3 liter engine and 1.6 liter engine	1.2 liter engine
Designation	9.5 × 900 LA "DA" 9.5 × 905 LA "DA" 9.5 × 905 LA "XDA"	9.1 × 900 mm
Belt tension:		
New belt	Deflection* 9 — 11 mm	Deflection* 15 mm
Used belt	Deflection* 11 — 14 mm	

\* With a pressure of about 7.5 kp (firm thumb pressure) in the center between the two pulleys

<b>Dimensions and weights</b>	<b>Sedan</b>	<b>Convertible</b>
Length (mm)	4140	4140
Width (mm)	1585	1585
Height, unladen (mm)	1500	1500
Ground clearance (mm)	150	150
Kerb weight (kg)	890	930
Permissible load (kg)	400	360
Permissible total weight (kg)	1290	1290
Permissible front axle load (kg)	540	540
Permissible rear axle load (kg)	760	760
<b>Permissible roof loads and trailer weights**</b>		
Roof load	kg	50***
Trailer weights		—
Trailer with brakes	kg	650 on gradients up to 16 ‰
Trailer without brakes	kg	400
Nose weight	kg	25 — 40

\*\* Subject to local regulations which may differ.

\*\*\* Use only racks supported in rain channel. Racks from the VW accessory programme are of this type. Distribute load uniformly.

Performance	Model	Sedan		Convert- ible	
	Engine	1.2 liter	1.3 liter	1.6 liter	
<b>Maximum and cruising speed</b>					
with manual transmission	km/h	115	125	130	130
with selector automatic	km/h	—	120	125	125
<b>Hill climbing ability (in %)</b>					
with manual transmission	1st gear	41	40	42	40
	2nd gear	21	20	22	21
	3rd gear	12	11	12	11
	4th gear	7	6.5	8	7
with selector automatic	Range "L"	—	33	35.5	34
	Range "1"	—	25	29	27.5
	Range "2"	—	18	20.5	19.5
<b>Capacities</b>					
Fuel tank	liter	about 42		about 42	
Engine oil	liter*	2.5		2.5	
Manual transmission:					
Gearbox and final drive:					
Initial filling	liter**	3.0		3.0	
Oil change	liter**	2.5		2.5	
Selector automatic:					
Converter	liter***	—		3.6	
Gearbox and final drive	liter**	—		3.0	
Oil bath air cleaner	liter	0.25		—	
Windshield washer					
Liquid	liter	about 2		about 2	
Air pressure	bar (psi)	3 (42)		3 (42)	
with headlight washer:					
Liquid	liter	about 8		about 8	

(Measured on good roads, loaded with 2 occupants, non-stop climb)

(Measured on good roads, loaded with 2 occupants)

\* HD oil for gasoline engines

\*\* Hypoid transmission oil

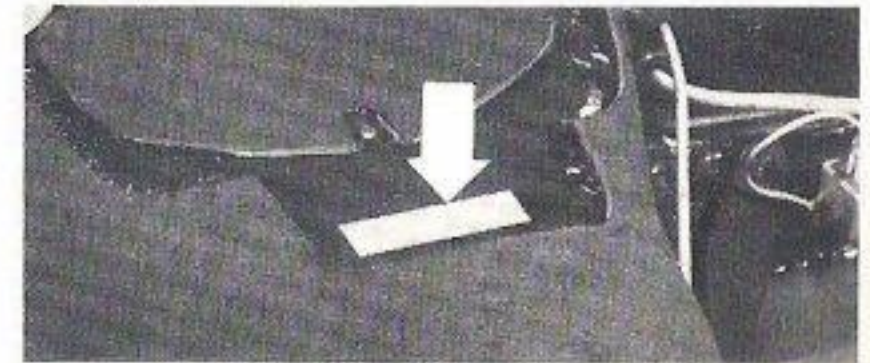
\*\*\* ATF with Dexron test mark  
Further details are given in part 2 of instruction manual.

# Identification plate, Chassis and Engine numbers

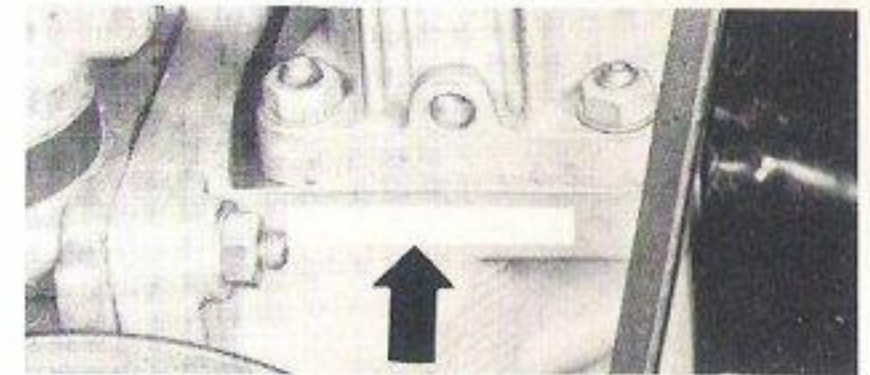
**The Identification plate** is underneath the front hood.



**The Chassis number** is stamped on the frame tunnel under the rear seat.



**The Engine number** is on the crankcase flange for the generator support.



# Vehicle data quiz

- What sort of fuel does your vehicle require?

Minimum octane rating: 1.2 liter engine: 87 RON  
1.3 and 1.6 engine: 91 RON } Regular fuel

If regular fuel with adequate anti-knock properties is not available, use premium or a mixture.

- What sort of engine oil?

## HD oil \* for gasoline engines

SAE grade (viscosity) according to time of year. See Part 2 for further details.

\* In some countries HD oil is known as "SD" oil.

- What is the difference in quantity between the minimum and maximum marks on the dipstick?

**1.25 liters.**

- How often should the engine oil be changed?

Every 6 months or at least at 1000, 5000 and then **every 5000 km**  
The amount required is 2.5 liters.

- How often should the air filter be cleaned?

The oil filling or the paper element should be changed every 30 000 km.

- What sort of oil is used in gearbox and final drive?

**SAE 80** Hypoid oil to Mil-L-2105 specifications (additive basis: Sulphur-phosphor) or in areas with arctic temperatures below  $-25^{\circ}\text{C}$ : ATF

- When is the gearbox and final drive oil changed?

**Only at 1000 km**

- What is used in the selector automatic?

a — Torque converter: ATF with Dexron test mark, e. g. B 10100 (all the year)  
b — Gearbox and final drive: As for manual transmission

- When is the oil in the selector automatic changed?

a — Torque converter: The ATF does not need changing  
b — Gearbox and final drive: Only at 1000 km

- How much brake fluid should there be in the reservoir?
- Do you require anti-freeze for your vehicle in the winter?
- Which spark plugs should be used?
- What is the correct V belt tension?

The fluid should always be level with the ridge round the reservoir.

Yes, but only in the windshield washer. It will work satisfactorily when it is freezing if sufficient window cleaning fluid is put in the water. Container capacity: see page 42

**Bosch W 145 T 1, Beru 145/14, Champion L 88 A**

or similar plugs from other manufacturers (see page 40). Fit new plugs every 20 000 km.

Engine	1.2 liter	1.3 and 1.6 liter
Deflection	15 mm	New belt 9 — 11 mm Used belt 11 — 14 mm

\* measured at a pressure of 7.5 kp (firm thumb pressure) in the center between the two pulleys.

- What is the correct tightening torque for the wheel bolts?
- What are the correct tire pressures?
- Where are the fuses to be found?

120 — 130 Nm (87 — 94 lb. ft.)

The pressures are given on a sticker inside the glove box lid (see also "Technical Data" — page 39).

**Spare wheel:** 3 bar (42 psi)

These pressures are for cold tires. Pressures which have increased due to heat from fast driving must not be reduced.

In the fuse box in the center under the instrument panel.

There are additional separate fuses in holders in engine compartment or under back seat.



VW 1303 englisch