

Westfalia Joker



Maintenance and Operation



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Introduction

These instructions contain important information about the internal features of your automobile. You should read prior to use, so that you understand the equipment and can use it properly.

Knowledgeable use and care for the upkeep of the van is also usually a pre-requisite for insurance claims. Further information about insurance is available from your dealer.

This manual is valid for all Joker models. Please therefore note that not all Joker models will contain all the features detailed in this manual.

The V.A.G Partners for VW Automobiles are available for the service of your Westfalia Camper Van. They can provide Westfalia replacement parts and repairs.

Please see your dealer for a detailed service, if required.

V.A.G firms are familiar with the Westfalia insurance terms

Equipment in the Westfalia Camper Van such as heating, fridge, and gas cooker are looked after by authorised service departments of the equipment manufacturers, in terms of repairs.

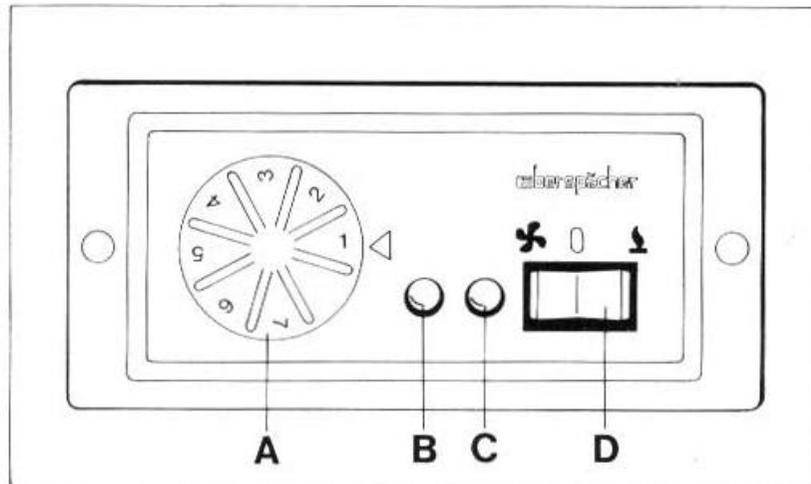
You can find further service points in your Westfalia pack. Further information eg: about service levels abroad, can be requested from the central customer service department of the Westfalia-Works KG, 4840 Rheda-Wiedenbruck, Telephone 05242 / 152 19

1. Operation

1.1. Heating / Clock Timer

Heater

Use the panel below to switch on / off and control the temperature. When the heating is on the inlet and outlet vents must be kept open and clear. The fan can also be used without heating to circulate air throughout the vehicle.



- A = Dial (Temperature Control)
- B = Red Control Light (Fault due to overheating)
- C = Green 'On' Light
- D = Switch – Heat / Air Conditioning – On/Off

Heating:

To Switch On

- Press Switch (D) to the right
- Turn dial (A) to Number 7
- The green control light (C) will come on and the heating will start

As soon as the temperature reaches the desired level, turn the dial (A) back until the green light (C) goes darker. Doing this will set the desired temperature. The space between each number on the dial (A) corresponds to about 5 degrees Celsius.

To Switch Off:

Turn switch (D) to the middle setting. The green light (C) will turn off. The fan will continue running until the heater has cooled down, and will then switch off automatically.

Ventilation:

To Switch On

Press switch (D) to the left. The green light (C) will turn on and the fan will begin to work.

To Switch Off:

Turn switch (D) to the middle setting. The green light (C) will turn off.

Warning !

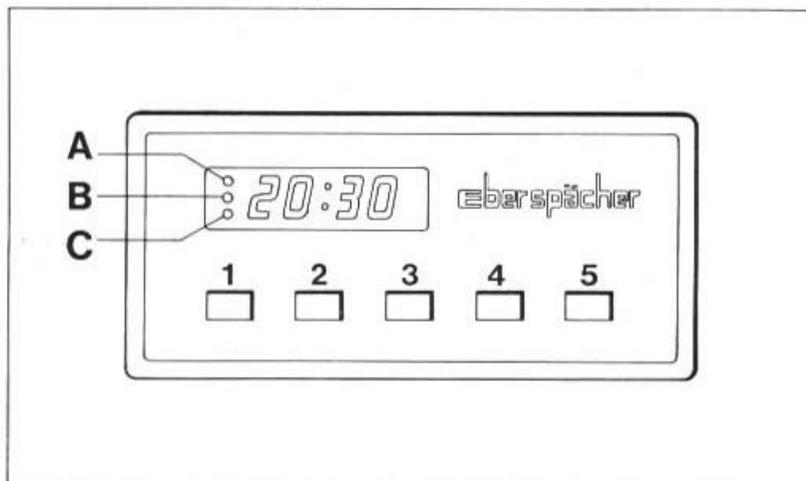
You can avoid the fumes from the exhaust of the heating entering the vehicle by closing the window on the left side of the vehicle.

Note:

The heating must be switched off in enclosed spaces (eg: in ferries) or when filling with petrol/diesel.

Clock

It is not necessary to switch on the ignition before using the clock.
The display constantly shows the time.



To Set the Time

- Press button 1 and either button 4 or 5 at the same time

To Switch on Heating: (possible to be independent from the previous choice)

- Press button 3, the possible heating time will appear in the display in minutes
- Set the temperature with the thermostat

To switch on the heating for long term use:

- Press buttons 1 & 3 at the same time
- The display will show 00

To Switch off Heating:

- Press button 3
- The fan will continue to run until the unit has cooled, and then will switch off automatically

The display allows you to choose 3 different times for the heating to come on. After pressing button 2 once, twice or three times, memories A, B, or C will be displayed.

You will reach the neutral position by pressing button 2 again. The time will show and the memory will be saved.

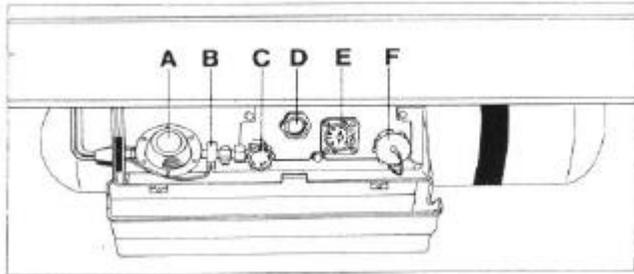
Setting Pre-Set Times:

- Press button 2
- Memory lights up (either A, B, or C will light up)
- By pressing button 4 & 5, the desired pre-set time will be saved in the memory of A, B or C.

To Erase Pre-Set Times:

(Heating switches on at a pre-set time)

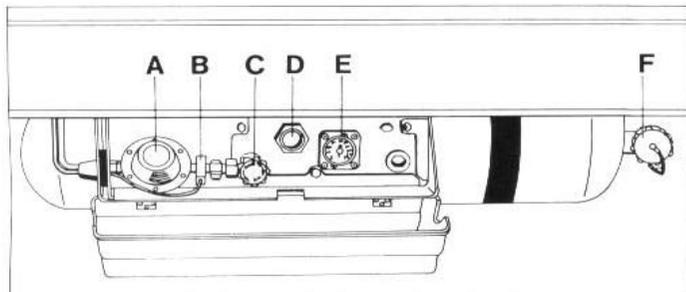
- Press button 2.
- Memory lights up (A, B, or C)
- Pre-Set time appears on the display
- After 20 seconds, the actual time appears on the display.



The Filling stop valve (F) is located on the end or under the cover of the gas tank.

1.2 LPG Equipment Gas Tank

The LPG tank can be found on the left side of the vehicle, under the body of the vehicle, and can be identified by its red colour.



A = Regulator C = Main Valve E = Level Indicator
B = Ice - Ex D = Safety Relief Valve F = Fill Up Point

Only fill the tank with DIN 51621 propane fuel from licensed petrol stations at home and abroad.

LPG used for the vehicle is normally identical in its composition to the propane bottled gas used for the household and camping.

To Fill the Tank

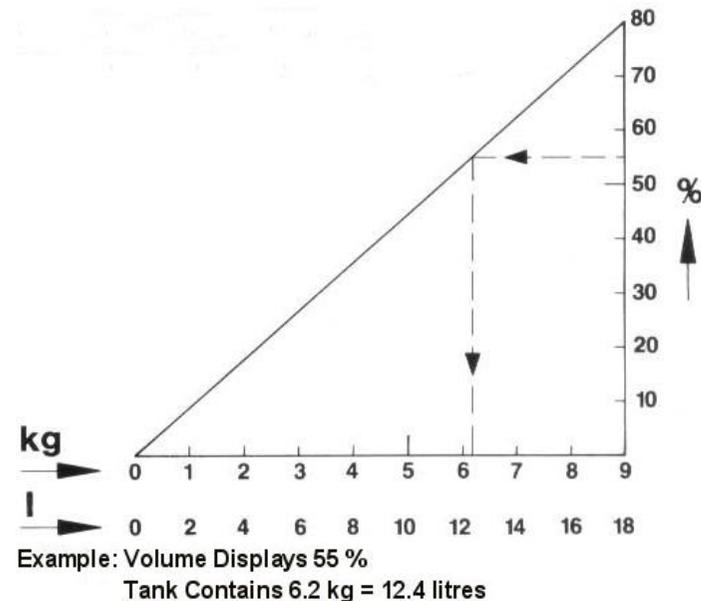
- Open up the fill up point (F)
- Put in LPG nozzle and fill up tank

There is an automatic filling stop valve that will prevent any more LPG going into the tank, once it is 80 % full.

The tank's level indicator display (E), which is behind the lockable cover shows values in percentages.

Determining the amount of LPG in the tank

With the diagram below, you can determine the volume of LPG in kilograms and litres from the displayed percentage



Regulator with 3 Way Valve

The pressure regulator reduces the container pressure to 50 Mbar which is the pressure needed for the attached equipment.

A gas bottle or an external gas source can be joined on to the quick release connector (A). Before you do this, you should take off the protective cover (B).

The leak testing of the LPG system can be carried out via the quick release connector (A), but this should be observed using setting 3.

Settings For The Valves C & D

Setting 1:

Delivers LPG from the LPG tank to the equipment which uses LPG in the vehicle.

Setting 2:

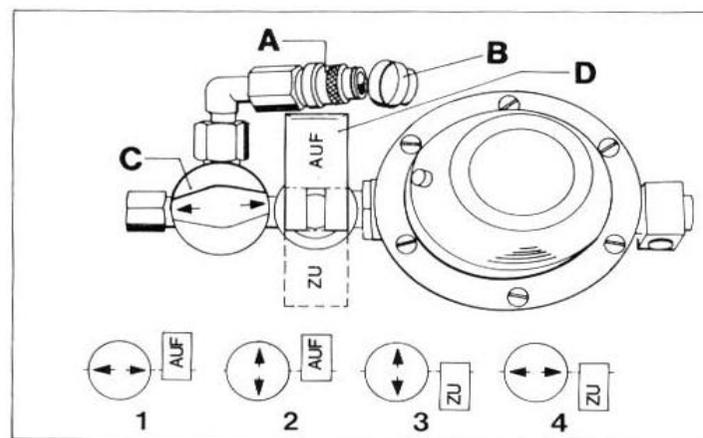
Delivers LPG from the LPG tank to the equipment which use gas outside of the vehicle - at the same time delivers gas where needed inside the vehicle.

Setting 3:

Emergency lead for an external LPG tank / gas bottle.
Test connection for leak testing.

Setting 4:

No LPG delivery



Warning !

- The position of the quick release connector (A) must not be changed
- Note the position of the valves C & D

Ice-Ex De-Icer

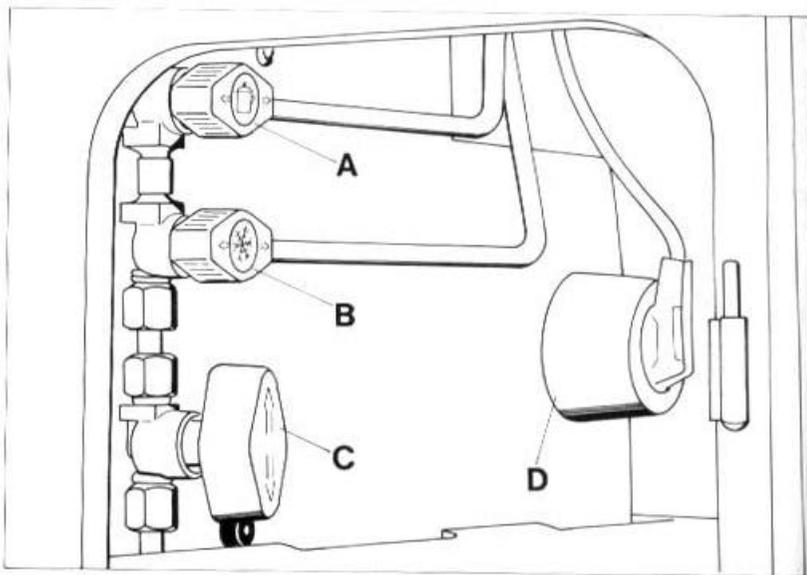
The Ice-ex De-Icer protects the LPG flow pipe from freezing. At external temperatures of +5° Celsius or less, you should switch on the Ice-Ex De-Icer from the display (via the switch on the front of the cooker), about 15 minutes before using equipment that uses LPG. The red control light will be illuminated.

Gas Valves

The equipment that uses LPG is ready for use when the main valve(C), which is attached to the LPG tank, the main valve (C) in the kitchen cupboard, and the valve which connects to the fridge or cooker are all open.

Close the valve (C) in the kitchen cupboard first if there is a problem with the LPG system. Next, close the main valve (C) adjoining the LPG tank.

When not using any of the equipment which use LPG, close the main valve (C) in the kitchen cupboard.



All valves are pictured in their OPEN setting.

A = Valve for the cooker
B = Valve for the fridge

C = Main Valve
D = 220v socket for the fridge.

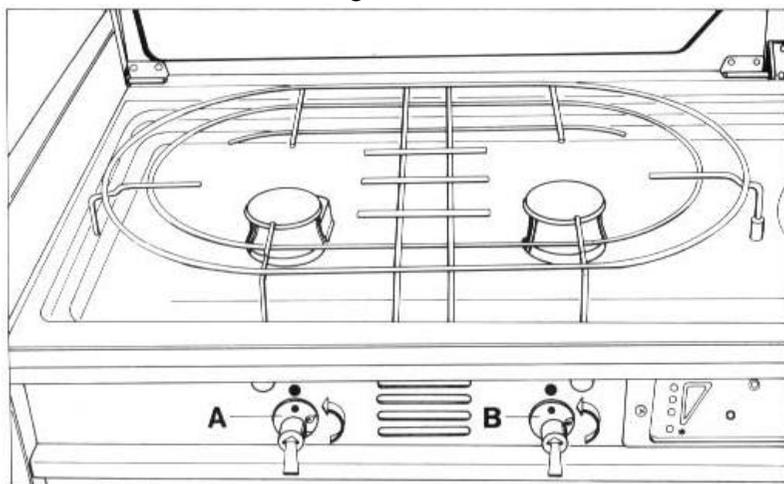
1.3 Gas Cooker

Warning ! Before opening the cooker cover, put the driver's seat in a vertical position.

When cooking with high heat levels, the more powerful of the cooker hobs is on the left hand side.

To Switch On:

Open the valves in the cupboard, press the cooker knob in, and turn to the left. Light the gas with a match or lighter, continue to press in the cooker knob for about 10 seconds (to ensure it remains lit). If the flame goes out when you let go of the knob, repeat the process above for lighting, and hold in the knob for a little longer.



A = Strong Cooker

B = Normal Cooker

To Turn Off:

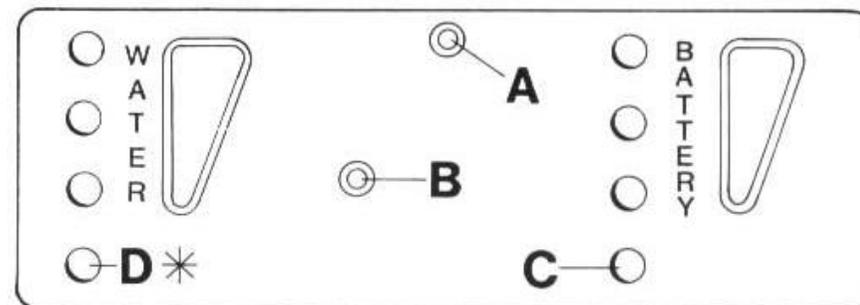
Turn the cooker knob to 0, and close the valve in the kitchen cupboard.

Warning ! When using the cooker, do not close the air vents (windows). Do not use open stove burners to provide heat.

1.4 Display Unit

The kitchen block has a display indicator and control panel for:

- (1) Display light showing fridge is running on gas.
- (2) Display lights indicating water level in the fresh water tank
- (3) Display lights showing second (leisure) battery charge level
- (4) Switch and LED (Lights) for the Ex-Ice De-Icer



- A = Switch for lights showing Water, Battery Levels, and Fridge working on Gas
B = Switch Ex-Ice De-Icer On/Off
C = Light for Ex-Ice De-Icer
D = Light for Fridge

Switch (A) can be used to switch the on or off the lights showing the level of the fresh water tank, the fridge working on gas, and the charge level of the second battery.

1.5 Fridge

Before using the fridge for the first time, the inside of the fridge should be cleaned with lukewarm water and a mild cleaning fluid.

Explanation of the controls

A – button to operate the ignition control

B – dial for the combined electric / gas thermostat.

The combined electric / gas thermostat can be used with the LPG or the mains electricity. The thermostat is not set up for use with 12v battery power. If the dial for the thermostat is turned fully to the left – past the point where you can feel some resistance – the mains use is switched off. This same dial position needs to be in the minimum setting for use with LPG (LPG use will only be switched off by switching the LPG connection to the fridge)

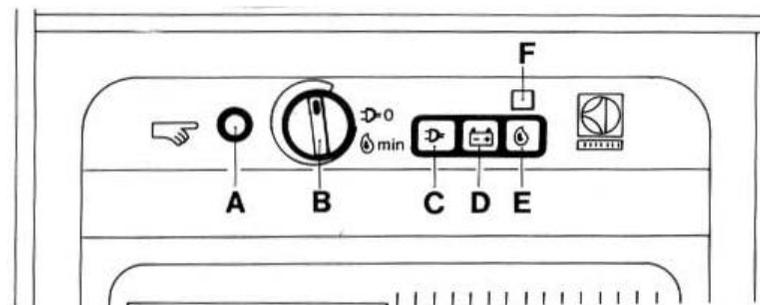
C to E – Buttons to switch the voltage on / off

C – Button for mains use

D – Button for 12V use

E – Button for LPG use

F – red signal light



Bringing into operation (220v)

Check if the voltage of the house or campsite mains connection is within the required voltage. This can be found inside the fridge at the top left. (The safety circuit breaker must be switched on)

1. Press in Button (C)
2. Turn the combined electric / gas thermostat dial (B) clockwise to the max setting.
3. When not in use, switch off button (C) by using button (D) or (E).

Bringing into operation (12V)

When using 12V, your fridge is protected by the general electrical circuitry of your vehicle. To prevent your vehicle's battery from draining, a measure has been built into the 12V circuitry to ensure that the fridge can only be used when the vehicle's engine is running.

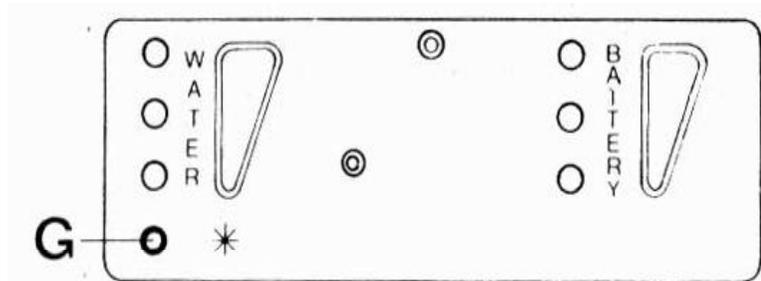
When the fridge is running on 12V it cannot be controlled by the thermostat.

- 1) Press in button (D) before driving off.
- 2) When not in use, switch off button (D) by using buttons (C) or (E).

Bringing into operation (LPG)

The fridge is designed for use with Propane or Butane gas only. Natural gas or city gas must not be used.

1. Open the valves (main valve of the gas tank, and quick release valve in the kitchen cupboard)
2. Turn the thermostat knob (B) clockwise to the max setting.
3. Press in button (E). Straight after pressing the button, the electronic gas ignition will switch on, the red signal light (F) will light up.
4. Press button (A) in and keep it pressed in. After 20-30 seconds, the burner will automatically ignite. As soon as the flame lights, the ignition will stop, and the red signal light (F) will go out. Keep the button (A) pressed in for another 15-20 seconds, then the thermo-electric ignition from the LPG tank will stay open.



You can see the progress of the ignition steps by flashing light (F). The use of the burner flame is shown by control light (G) (see below) as long as switch (A) on the cooker display is switched on.

Should there be a cause (other than the LPG tank being empty) for the gas flame to go out, it will ignite again automatically. If it does not ignite due to a defect, the protection mechanisms will activate and will automatically shut off the LPG supply.

5. When not in use or if the fridge has a problem using gas, stop the gas supply to the fridge & switch off button (E) by using button (C) or (D).

Regulating the temperature of the fridge

You can regulate the temperature of the fridge by using the combined electric / gas thermostat. After sufficient cooling in the max position, you can turn the temperature knob (B) anticlockwise to your desired temperature.

Important Notice !

Always watch out that the fridge is never connected to 2 power sources (i.e.: gas & electricity) at the same time. It would then not work, and will possibly suffer damage. Such damage would not be covered by the warranty.

1.6 Electrics

12V / 220 V Appliances

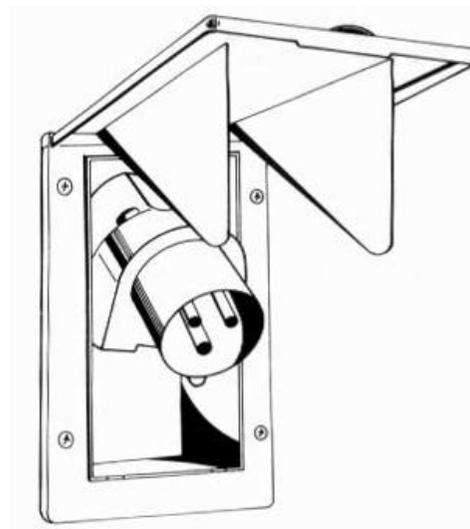
The 12V appliances (water pump, heating, display, fridge fan, and ice-ex) are supplied by the second (leisure) battery.

The lights in the living space are powered by the starter battery.

Important Notice !

12V Battery Use: Please note that the battery capacity is limited when left for a while without recharging. For example, at least 11V is required for using the additional heater.

220V electrical appliances (max 2000 Watts) can be used with the internal plug sockets, as long as the socket on the outside of the vehicle has been connected to the mains.



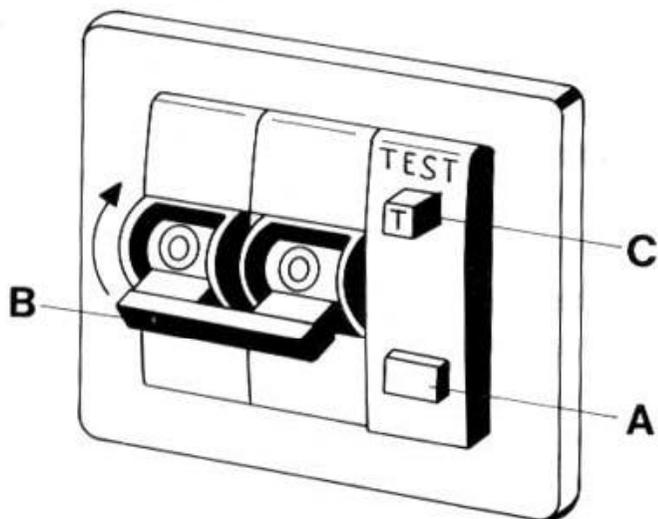
The external socket 220v – 16 Amps to CEE 17 (European Standard) is located on the external left hand side of the vehicle.

Important Notice !

Use with 220V: Attach the vehicle to the mains via the outside plug. The outlet socket, battery charger and the fridge are fed from the safety circuit breaker.

Safety Circuit Breaker

This is located under the storage next to the kitchen block, and serves as a power surge protector.



To Use: Press in the blue button (A) until it clicks in, then bring the black switch (B) to the position (1) (i.e.: push up)

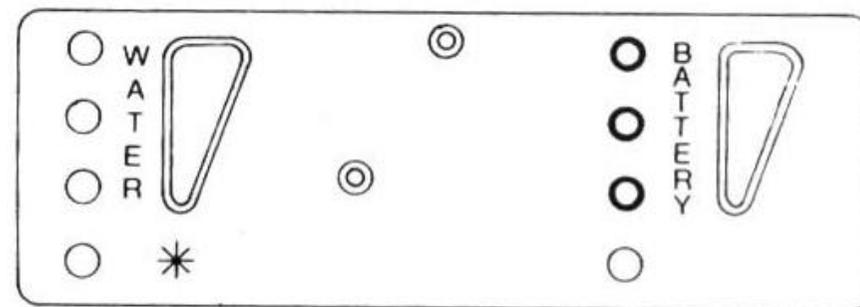
To Test Its Use: To test its use, 220V mains power must be connected to the vehicle. Press in the white test button (C), the

blue button (A) should then pop out and the black switch (B) will go to the 'O' position.

Important Notice ! When the circuit breaker is not switched on, the 220V appliances (i.e. fridge, battery charger, and outlet socket by storage next to the kitchen block) will not work.

Battery Charger:

The battery charger operates automatically. As soon as you have attached the 220V current to the vehicles external socket, the charger is ready for use. The charger will check the charge status of both the starter and second battery. Where appropriate the batteries are then charged up to the max. battery voltage. Once the batteries are fully charged, the charger will switch itself off.



The 3 control lights on the right of the display show the charge status of the second battery.

Green = more than 12.5 volts

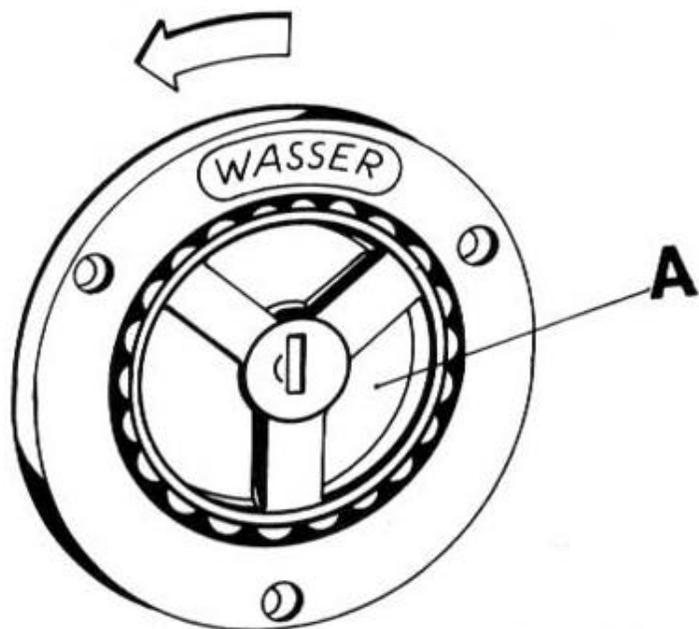
Yellow = less than 12.5 volts

Red = less than 12 volts

1.7 Water Supply and Water Disposal

Water Filler Cap

The lockable water filling cap can be found on the left hand side of the vehicle (on the outside).

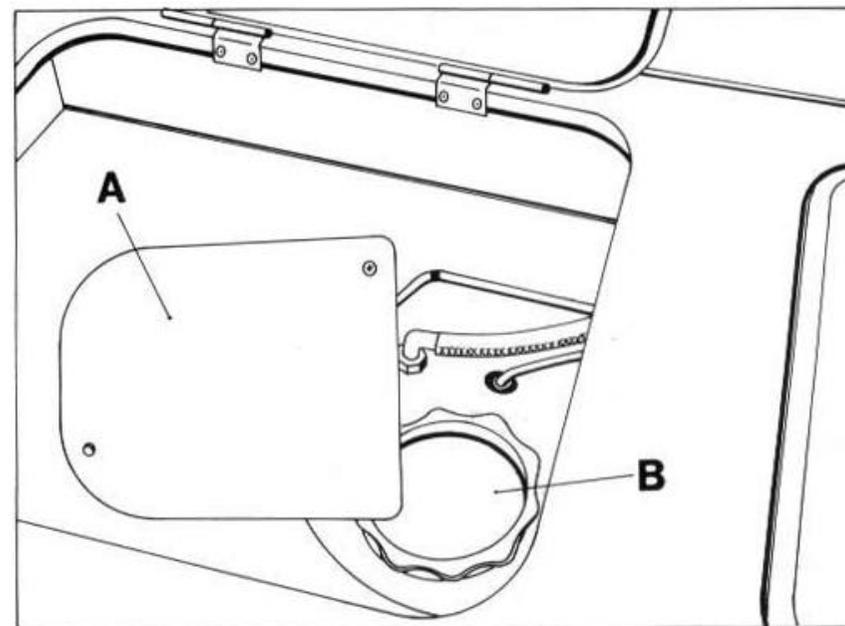


To Open:

Push (A) inwards and at the same time, turn in the direction of the arrow

Fresh Water Tank

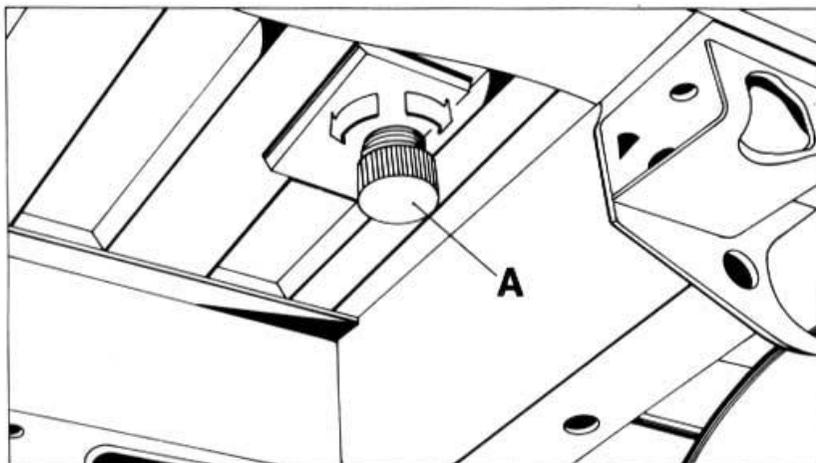
The fresh water tank in the Joker is found in the storage compartment next to the rear seat. The cleaning opening is accessed in the storage compartment next to the rear seat.



To Open:

- Take out one screw of the cover (A) and loosen the other screw.
- Push cover (A) top one side and turn the cleaning access lid (B) to open.

To empty the fresh water tank, open the drainer (A) under the bottom of the vehicle..



Sink:

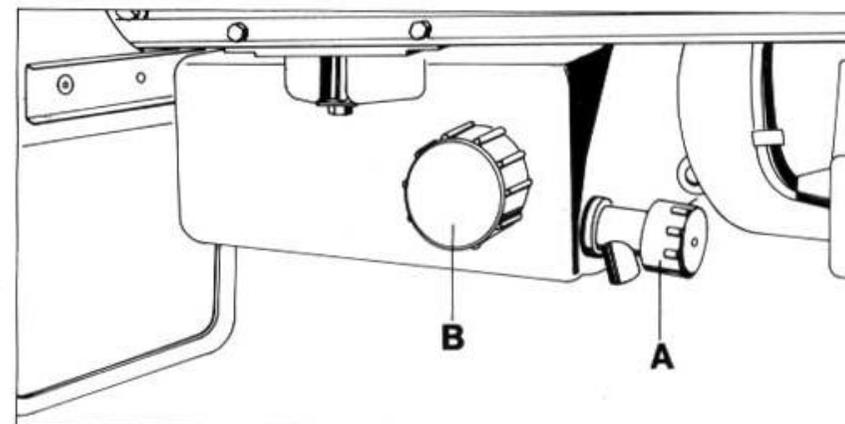
The sink can be found under the cover of the kitchen equipment. By switching on the tap, the water pump in the fresh water tank will be switched on automatically.

A heat protector is situated under the cover on the left. After folding this down, when the cooker is not in use, it can be used as a draining board.

Water Disposal

Waste Water Tank

Water will drain from the sink to the waste water tank. To empty the tank, open the waste tap (A). Clean the tank thoroughly through the cleaning opening (B).



Instruction:

Please note the camping site's rules on waste when emptying the tank.

Warning !

It is absolutely necessary to empty the whole water system when not in use in the winter (where danger of frost can occur).

1.8 Seats and Beds

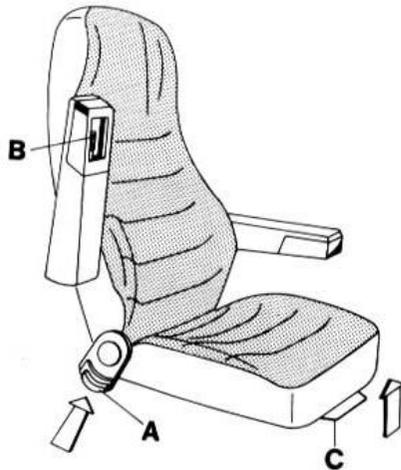
Front Seats:

Please see the vehicle manual for use of the front seats.

Westfalia – Comfort Seats (Driver and Passenger Seats)

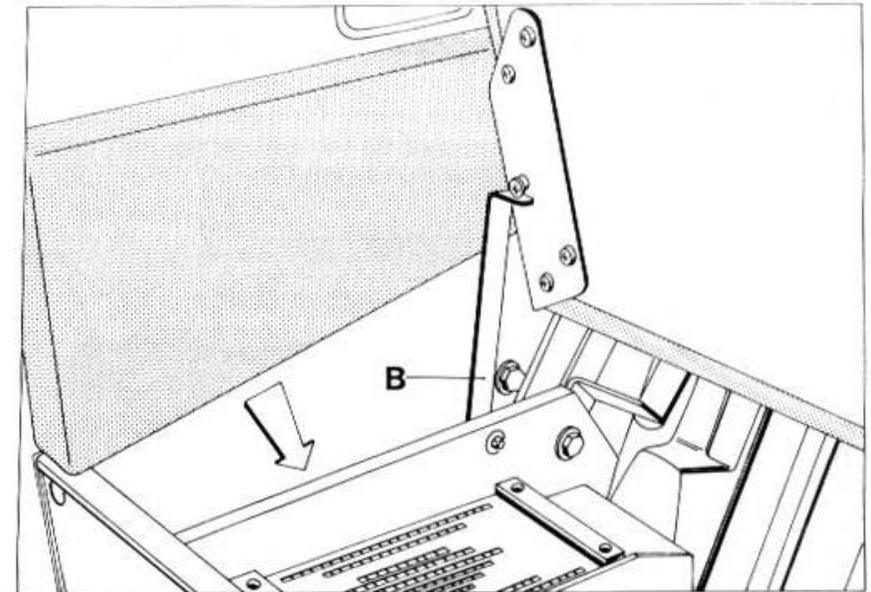
To adjust the seats:

- Take weight off the back of the chair, and pull handle (A)
- Put back of chair to the desired position and let go of (A). The seat will click into place.
- (C) is to adjust the distance of the chair to the front.
- To adjust the armrests, turn the knob (B).



Seating in the Back

There is storage space under the rear seat. This is accessible by propping up the seat base. Secure the seat base with the bracket (B).



Warning !

Between the body of the vehicle and the wooden wall (where the arrow is) is the heating air intake. To prevent overheating, this space must not be covered. The battery charger must also not be covered.

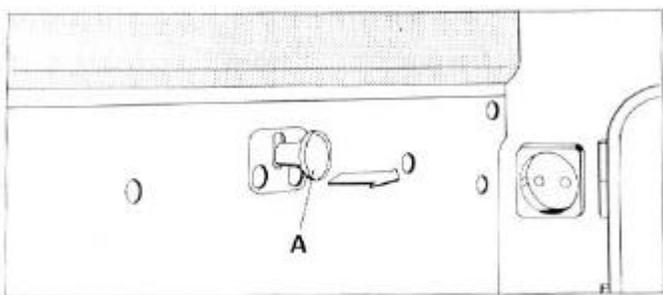
To Lower the Bed:

If the back seats are equipped with head rests, these need to be removed before building the bed.

To Build the Bed:

- Loosen the seats by pulling Knob (A).
- Pull the seats up slightly and forwards.

The back seat will then fall into the bed position. This will then form the double bed.



To Return Seats to the Seating Position:

- Pull the seats up by 90 degrees until they click into place.
- Put the seats back, until they are secured into place.

Note: In the flooring of vehicles with a PVC Floor, there are tracks to secure a middle seat. Where a middle seat is built in, the lower double bed cannot be used.

Double Bed in Pop Top Roof:

The roof must be set open:

- Pull the upper bed unit about 10 cm forward and fold down.

To Put Back

- Fold the bed unit at the front down, and push back.

Double bed in the High Top Roof:

To assemble the bed into position:

- Release the catches and fold down the flap.
- Pull the bed extension forwards at the same time.
- Put in the middle cushion.

To put the bed away, do the above steps in reverse.

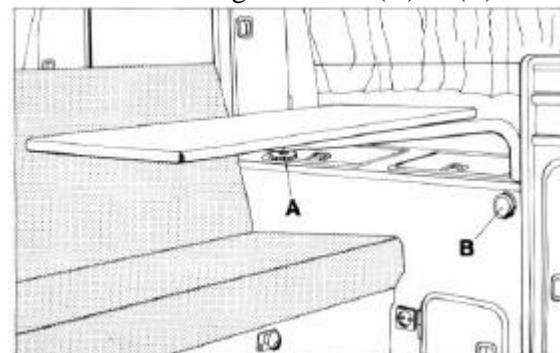
Note: If there are no security measures for children, small children should sleep in the lower beds.

Warning ! During the journey, no-one should occupy the upper beds.

1.9 Tables

Swivel Table

- Loosen the table using the knobs (A) & (B)
- Adjust the table to the required position
- Secure using the knobs (A) & (B)

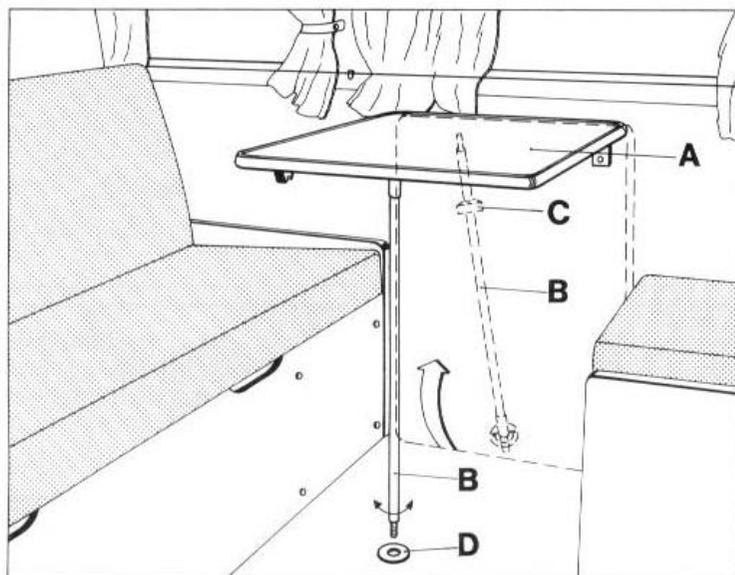


Folding Table

To Set Up

- Pull up Table (A) from the grip (below left) with a light pull
- Pull up Table (A) and loosen the stand (B) from the grip (C)
- Push the stand (B) down & put the table in the horizontal position
- Turn the stand (B) to secure in the hole (D) in the vehicle's floor

To put back, follow the above steps in the reverse order



Warning !

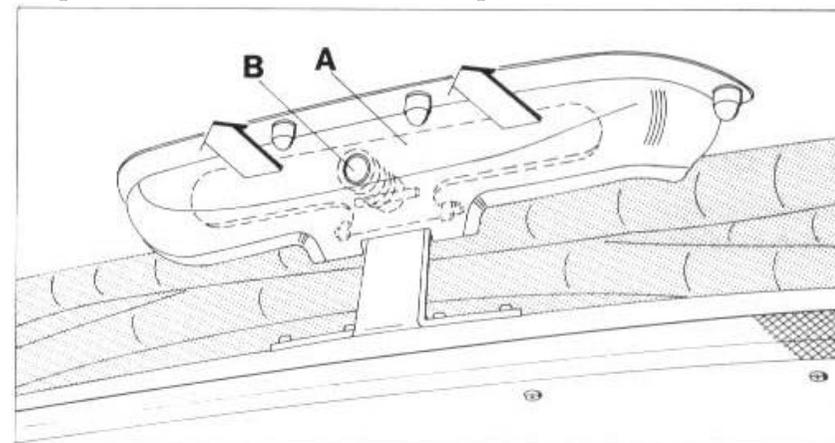
When setting up and taking down the table, beware of the length of the stand

1.10 Pop Up roof with Luggage Rack

To prevent creating a vacuum when setting up the roof, you need to open a door or window prior to putting up. Similarly, when closing the roof, the air must be able to escape to prevent any damage from the material blowing out and getting caught.

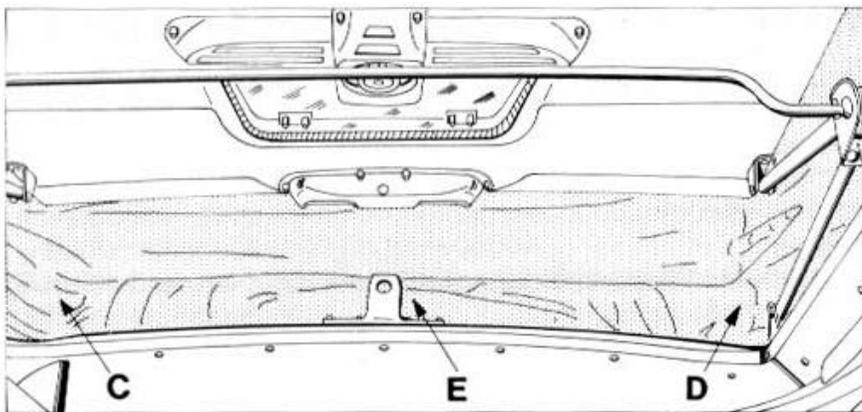
To Open

- Open the lock by pushing back the lock (A) in the direction of the arrows
- Push up the roof as far as possible
- For the last part of putting up the roof, use the stand and press this forward until it locks into place.



To Close

- Push the stand back and under, and close the roof about 20 cm
- Pull the material forward in the corners C&D
- Fold the material to prevent it getting caught
- Pull the roof down with the grips, until (A) closes (you will hear this) and secure locks (B)
- Look in area (E) to ensure the material has not got stuck / jammed anywhere



Warning !

To prevent damages, the vehicle must not be driven with an open roof.

1.11 Ventilation / Drivers Cab Curtain

Opening Window

The opening window is adjustable.

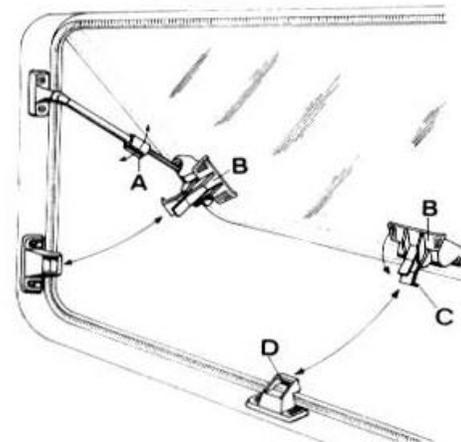


Diagram in the OPEN position

To Open

- Lift the arm (B) of the locks up completely to the desired setting
- Turn the stabilisers (A) to secure

To Close

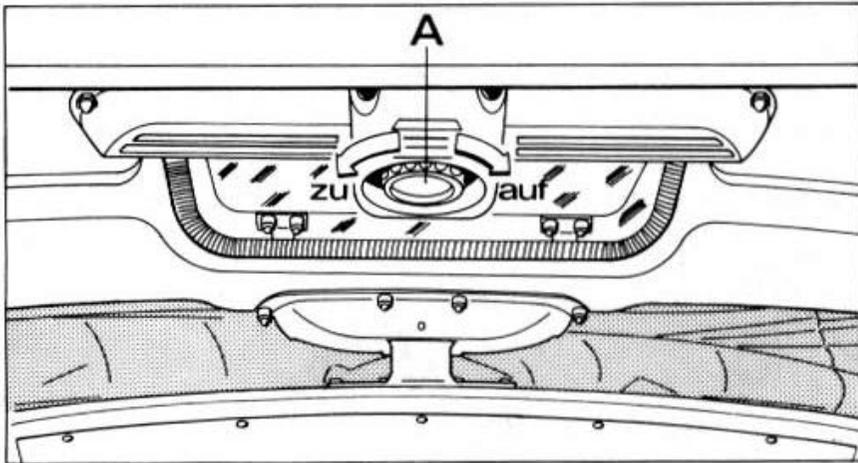
- Levers (B) of the 3 locks need to be open
- Stabilisers (A) on the side supports need to be loosened, by turning either to the left or right
- Close the window
- Press the levers (B) in, so the clip (C) lies behind the latch (D)

Warning ! The window should not be open when driving.

Roof Vent (Poptop Roof)

To Open

- Turn dial (A) to the right in the direction of the arrow
>>to open<< (AUF = OPEN)

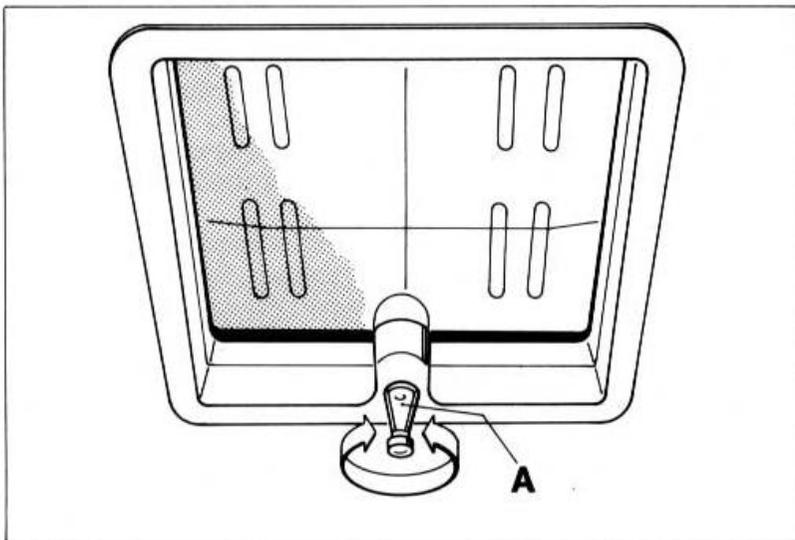


To Close

- Turn dial (A) to the left in the direction of the arrow
>>to close<< (ZU = CLOSE)

Roof Vents (Hightop Roof)

Turn the lever (A) to open or close the roof vents.



Warning !

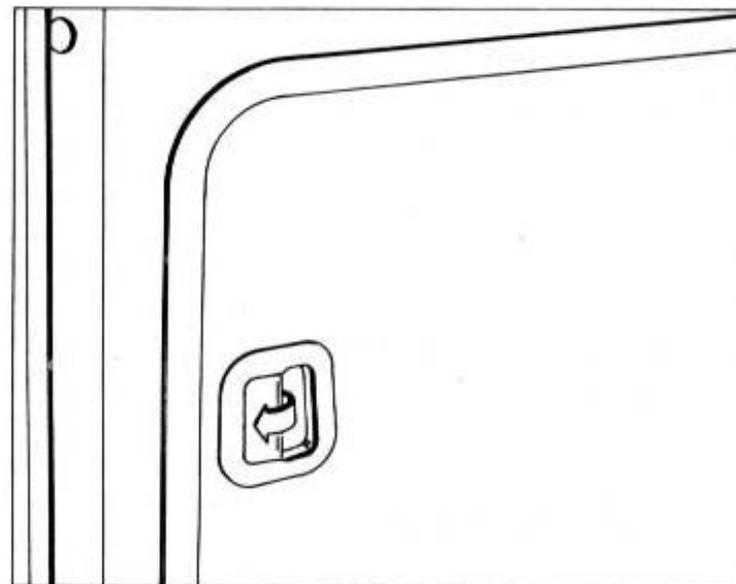
To avoid any damage, the roof vents should stay closed whilst driving.

Drivers Cab Curtain:

- Hang the curtain on the buttons / poppers.
- To secure the curtain at the front, fold down the sun visors.

1.12 Furniture Locks

To open doors, flaps, cupboards, drawers, or the lid of the kitchen appliances, pull the grip in the direction of the arrow.



2.0 Care and Maintenance of Equipment

2.1 Heating

The outer casing of the auxiliary heater is factory equipped with surface protection. However, whilst driving damage to the protective layer can not be excluded, it is recommended that the housing is checked at certain intervals (twice per year), and repaired if necessary.

To do this you can use normal corrosion inhibitors.

In summer you should run the heating once a month for about 10 minutes.

The life of the glow plug (D2L) and spark plug (B2L) is limited. Before camping in winter check the condition of the glow plug (or spark plug).

After 10 years the heat exchanger of the heater must be changed for an original equipment part by either the manufacturer or an authorised repair shop.

2.2 Gas Cooker

To clean the stove top and the gas burner, remove the stove grate by releasing at the two points it is fastened to the stove top.

When cleaning the gas stove, make sure that the thermocouple that sticks up near the gas burner is not bent. A bent or broken thermocouple prevents any further use of the burner, as the flame goes out, despite prolonged actuation of the safety pilot time and again. The thermocouple needs to be replaced by an expert if this happens.

If the flame pattern overtime becomes uneven, this is a sign of poor combustion. Regular cleaning of the burner cover is advisable. The burner covers are removable by twisting them a quarter turn, so that the slots can be cleaned with ordinary water or a brush.

2.3 Refrigerator

Defrosting of the appliance

The ice on the evaporator should be no more than 3 - 4mm thick, so that the cooling capacity is not diminished.

To defrost power is interrupted when operating using gas by shutting off

the gas supply or when operating in electric mode by the switch. The defrost water runs into the drip tray, which can be pulled forward and emptied. Do not use a heater to speed up the defrost as this could damage components. The door of your refrigerator has a PVC edging to ensure a proper seal. Clean this PVC edging only with clear water and never with chemical additives.

Measures when fridge is not going to be used for a long period.

If your fridge is going to be out of service for a long time switch off the power supply and empty contents. After the defrosting of the refrigerator it should be carefully cleaned and dried (leave door open or detach).

2.4 Second Battery (Leisure Battery)

Proper function of the electrical system, especially the additional heating depends very much on the charge level of the second battery.

Whilst driving the second battery is charged by the alternator.

The second battery is located under the driver's seat. It can be reached by pushing the seat forward, and opening the cover.

How often you should check the battery acid level will depend on the operating conditions of the vehicle and the season.

Even maintenance free batteries must be checked and maintained (see instructions for the vehicle).

When detached the second battery terminals should be insulated. They must not come into contact with vehicle earth.

Well before the start of a journey the battery should be sufficiently charged using the built in battery charger.

2.5 Water supply and water disposal

Fresh water tank

From time to time you will need to clean the contacts on the inside of the fresh water tank.

Lime deposits or chlorine can affect the electrical conductivity to the display unit. An accurate water level display is no longer given. At high temperatures and low water levels residues may form in the fresh water tank and lines. It is therefore advisable to change the water more frequently or to add commercial chemicals for filtration and sterilisation.

Waste water tank

Occasionally, the water tank should be flushed out to ensure proper emptying via the drain tap.

Sink

The sink is stainless steel and can be cleaned using standard products.

2.6 Upholstery, Drivers Cab Curtain and Carpet

The cushions are composed of polyether foam. The upholstery and curtains should be chemically cleaned, if necessary, do not wash. The carpet is fully synthetic and should be cleaned using commercially made shampoos.

2.7 Furniture

All visible parts of furniture are plastic coated. Maintain furniture and fittings with the same furniture preservative products that you use in your home.

2.8 Poptop Roof

Through intensive airing condensation can be avoided (or kept within acceptable levels) in the pop-top roof.

To prevent stains from forming in the flock and bellows of the pop-top roof, the roof should not be closed if it is wet, when possible.

For longer periods of disuse of the pop-top roof, for example in winter, the bed pad should be removed from the roof and the roof put up from time to time.

Thus, the formation of moisture and the consequences can be prevented.

2.9 Windows

The cleaning of the acrylic double windows should be washed with plenty of water with added soap or detergent. A 10% addition of detergent will prevent the build up of static electricity and hence dust.

You should only use very soft cloth or natural chamois to rub the plastic windows. Light scratches can be polished with brass polish or liquid Stahlfix.

A subsequent treatment with silver polish is recommended.

The double glass should not be treated with de-icing spray or ice scraper.

Occasionally rub the rubber seals lightly with a rubber-care product. Then they will not freeze in the winter.

The two plugs present on the inside of the window should not be removed. Otherwise condensation can form in the cavity of the window.

2.10 Outer Decals

The application is car wash safe and should be treated the same way as the exterior paintwork of the vehicle. The decals must not be cleaned with high pressure jet wash systems.

The decals should not be treated with tar remover, if necessary, use purified gasoline.

2.11 Joints and Hinges

The hinges of the pop-top roof should be lightly oiled periodically at the joints or even better, sprayed with a non-greasy spray.

The locking mechanism of the elevating roof, particularly the locking bolt should also from time to time, be greased or sprayed lightly.

2.12 Gas tank

We recommend to treat the gas tank with underbody protection. The red marking strip must however remain recognizable, or it must later be renewed. In addition, clean the valve regularly. The hinges and lock on the gas tank cover must be cleaned and oiled occasionally so that it continues to function properly.

3.0 Technical Data and Description

3.1 Heating

Your vehicle is equipped with a fuel heater, Eberspacher, type B2L or D2L. The heater works are independent of the engine, but is operated from the fuel tank. The fuel consumption in continuous operation is about 0.3 l / h. In normal operation the fuel consumption is lower. The on, off and temperature switch for the heating are on the control panel.

Normal Operation of the B2L (petrol)

The fuel pump is switched off. The heater operates without heat but at full fan speed for about 3 minutes, then with a reduced fan speed until the fan goes off and a new cycle begins. Once the room temperature drops below the temperature set at the control panel, the thermostat switches on the fuel supply and the heater is restarted. A built in heating coil switch ensures the coil remains switched off in normal operation if the ignition sparks are sufficient to form a flame.

Normal Operation of the D2L (Diesel)

The fuel quantity is reduced to approx 25%. This means that the heating capacity also drops to approx 25% (600 watts). Once the temperature drops below the room temperature set at the thermostat, the thermostat switches the fuel quantity and thus the heat capacity back up to 100%.

The heater is equipped with an under voltage sensor. That means that at a voltage below 11v the heater will not ignite and switches off.

We then recommend to start the vehicle engine, and start the heater again with the engine running.

Technical Data	Petrol (B2L)	Diesel (D2L)
Rated voltage	12v	12v
Max fuel consumption	Approx. 0.32 l/h	Approx. 0.27 l/h
Power consumption	Approx. 15W	Approx. 15W

3.2 LPG Installation

The gas installation is built according to safety guidelines DVGW G 607. The certificate issued by the factory is located in the vehicle.

Every two years the gas system must have a repeat of the leak and combustion test in accordance with paragraph 6.1 of the technical rules for "gas appliances and fire places" within vehicles. A leak test is also required in the case of repair of the gas pipeline system. Only DVFG recognized technical experts may carry out this test. There are about 1,000 test centres in the Federal Republic of Germany. You can find test centres in your area by contacting the Association for LPG DVFG - 6242 in Kronberg / Taunus, Minnholz 2, phone 06173/4077. You will also receive relevant information from the company Westfalia Phone (05 242) 15/219. All gas appliances have built-in safety ignition,. That is if the flame goes out the gas supply is cut by the automatic safety mechanism. It is not allowed to make changes to the gas installation and gas appliances. An examination of the gas tank must be conducted every 10 years. The certificate accompanying a vehicle for the initial testing of the gas tank should be kept safe. At eventual resale of the vehicle please hand over the certificate with the operating instructions to the buyer.

Gas Consumption
 Refrigerator Gas 5-15g per hour
 Normal burner stove, approximately 140 g / hour
 Strong burner stove, approximately 164g / hour
 Ice-Ex De-Icer
 Ice-Ex De-Icer has a power consumption of 4W

3.3 Refrigerator

Your refrigerator is equipped with a newly developed absorption cooling unit, which ensures it functions even if the vehicle is driving uphill or downhill (up to 15%) or is parked on either a sloping parking place or verge. The cooling temperature increases only insignificantly. In order to improve the cooling performance at high ambient temperatures there is a fan (0,6 Watts) mounted under the fridge that switches on automatically if the temperature reaches 52°C around the condenser sheet metal and at approx. 45°C switches off again. **Note:** The fan is connected to the 12 V circuit, and is also effective on 220 V and gas operation.

Technical data

Gas operation:
 Power consumption gas: 15 g / hour
 Supply pressure: Cat I3 LPG 50 mbar
 Electric operation:
 220V 50Hz 85 Watt thermostatically controllable
 12V 85 Watt not controllable
 Contents: 41 litre gross
 Refrigerant: NH3 absorber

3.4 Electrical System

The vehicle has a combined 12 / 220V power supply.
 In the 220V supply input an automatic safety circuit breaker is installed.

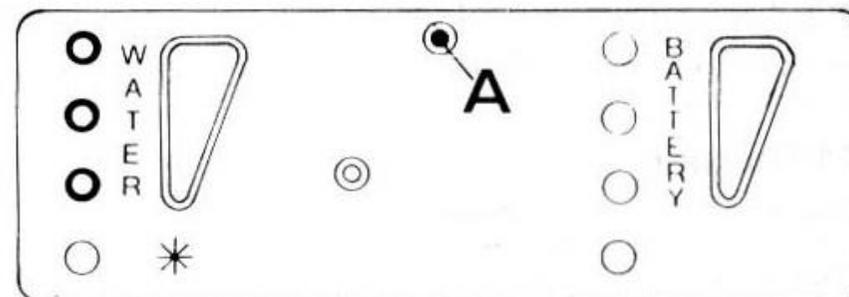
Automatic safety circuit breaker:

Line Protection 10 Amp

Operator Protection 6 -10 mA with max 30 ms cut out time
 The disconnection takes place two-pole.
 Secondary (leisure) battery: 12 V 63 Ah under the driver seat

3.5 Water Supply and Water Disposal

Fresh water tank level indicator



Joker / Club Joker 1 und 3

Tank capacity 55 litres			
	100 - 73%	73 -18%	18 - 3.5%
green	#		
yellow		#	
red			#

Waste water tank

Tank capacity 20 litres

3.6 Vehicle

Vehicle height:

Poptop roof 2080 mm (roof closed)
 Hightop roof 2700 mm (roof vents closed)

Weight of the vehicle

	Permissible total weight incl.	Unladen weight (with driver)	Payload
Joker 1 and 3	approx 2400kg	approx 1800kg	approx 600kg
Club Joker 1 and 3	approx 2400kg	approx 1820kg	approx 580kg

When equipped with automatic transmission, the load is reduced by approximately 40kg

Note that the specified values vary depending on equipment (fixed mount accessories) and vehicle (mosaic Joker).

4. Self Help

The tool kit is placed at the factory in the storage compartment of the rear seat.

4.1 Heater

Heating does not start, no fan noise

- Check that second battery (leisure battery) is fully charged.
- Check 25 Amp fuse for the additional heating.
- Check motor current fuse in the heating control unit.

WARNING! As a replacement, use only T 1.25 A fuse. The use of other backups in case of failure can cause damage to the control unit.

Fan runs for around 20 seconds and then switches off automatically:

- Check that second battery (leisure battery) is fully charged (start vehicle engine and with the engine running and start heating).

After switching on the equipment runs only for around 3 minutes.

The heater does not ignite and is automatically switched off.

- Turn the heater off and on again (no more than twice). If heater still does not ignite it needs to be repaired in a workshop.

Heating is switched off due to overheating.

Red light (B) flashes in the front panel.

- check air is being allowed to flow without restriction. Switch heating off and on again.

If the function of the heating can not be restored, we recommend you contact the customer service department of the equipment manufacturer. A customer services directory is included with the equipment.

4.2 Fridge does not cool

12 v operation (only possible when driving)

- check 16 amp fuse in the fuse box

220 v operation

- Check whether the safety circuit breaker is on.
- Check the 220 volt plug in the cupboard is inserted in the socket.

Gas operation

- Check that valve is open on the gas tank, main valve in the kitchen cupboard and the quick action valve for the fridge.
- Check whether ice-ex is switched on (required at temperatures of + 5°C and below).

If the function of the fridge can not be restored, we recommend you contact the customer service department of the equipment manufacturer. A customer services directory is included with the equipment.

4.3 Battery Charger

- Check if 220 v is applied to the vehicle.
- Check whether the safety circuit breaker is on (near bottom of the locker next to the kitchen combination).

4.4 Water pump does not work

- check the second battery is charged by pressing the toggle switch on the display unit, where appropriate, recharge battery.
- Check 16 amp fuse in the fuse box.
- if temp is below 0°C check if ice has formed in the water supply system.

4.5 Fuses (see also circuit diagram)

E1 25 Amp fuse for the auxiliary heater is located in the fuse box under the safety belt roll behind the drivers seat.

E2 16 Amp fuse for refrigerator, water pump, ice-Ex and display unit is located in the fuse box under the safety belt roll behind the drivers seat.

E3 Safety circuit breaker 10 mA 10 Amp fuse is located below the storage box next to the kitchen combination.

E4 1 Amp fuse for ice-Ex and display unit is installed in the display unit.

E5 2 Amp fuse in the battery charger. The battery charger is in the rear seat storage area.

The motor current protection (fuse T1.25 Amp) of the heater blower is located in the control unit of the heating. The control box is in the rear seat storage area mounted next to the battery charger.

5.0 General Reference

5.1 Preparing for Travel

Before starting a journey in the camper, we recommend using the following travel preparation check-list.

Prior to departure

Decide on your destination

Prepare itinerary (round trip)

Consider vaccination requirements of countries to be visited

Obtain Traveller or Euro cheques

Cancel post and newspapers or leave vacation address

Papers

Identity card or passport

Vaccination certificates

Driver's licence (International?)

Carnet or Triptik

Insurance Green Card

International Medical Card

Necessary papers for the dog

Petrol Vouchers

Maps

Travel Guide

Vehicle Registration

Vehicle Operating Instructions

Service Stations Directory

List of LPG Filling Stations

Camping Guide

Vehicle Preparation

Carry out inspection

Tool kit

Check the second battery charge level

Check gas level (before a trip abroad may be required)

Fill up water

First-aid kit

Car accessories

Tow rope

Deutschland plate

Parking disk

Snow chains

Jump start cables

Flashlight

Sports and Entertainment

Swimwear

Sports equipment

Children's Toys

Entertainment Games

Radio / TV

Books / Magazines

Outdoor Living

Camping chair, folding

Camping table, folding

Parasol

Sun Shade

Awning

Cleaning and maintenance

Toiletries

Towels

Washing-up liquid

Dishcloths

Detergent

Shoe polish

Stain remover

Sewing kit

Fuel jerry can

Warning triangle

Clothing

Warm clothing

Light clothing

Rain gear

Underwear

Stockings

Shoes / Wellington boots

Bed

Sleeping bags

Blankets

Pillow

Travel rug

Bed linen

Kitchen

Tableware

Cookware

Cutlery

Provisions

Cans and bottle opener

Matches

Pocket knife with multiple functions

On the day of departure

Unplug radio and TV

Disconnect aerial

Empty fridge and unplug power

Travel Documents

Vehicle papers/breakdown cover

Euro-cheques, traveller's cheque

Cheque card (keep separate)

Close all doors and windows

5.2 Loading and Tyre Pressure

The correct loading of the vehicle with laundry, luggage, food, etc. is important for a good ride. It is preferable to put the main weight in the lower storage areas and lighter items in the upper storage areas.

Loading of the roof luggage tray

We recommend using a luggage bag (Westfalia Order no. 216 004 443 001) with evenly distributed max load: 50Kg.

Mounting Brackets

If you would like to fit sports equipment such as surfboards, we strongly recommend that you only use the mounting brackets made by Westfalia.

Tip – to achieve good driving of your motorhome ensure uniform load distribution

Note - The screws of the mounting brackets should be checked after a short time and at regular intervals and tightened if required.

Tyre pressure

As the campervan has been designed to carry a particular load including camping equipment, you can drive safely using the details supplied by VW. Note the tyre indications for higher speeds.

5.3 Before a Journey

Make sure windows and roof vents are closed to prevent drafts and damage.

Before proceeding with your journey close the main valve to the gas tank.

Your vehicle documents include a list of filling stations. Please note in the directory are hints for travelling abroad. The necessary adapter (extra piece) for filling the gas tank abroad is available from your dealer as an accessory (Westfalia Order No. 523 266).

So you always have an updated list of filling stations in Europe we recommend you request when needed the latest gas filling station directory from ADAC Headquarters, Munich 70, Baumgartner Str 53,

Driving off from filling stations

Take care that gasoline or diesel heater must be turned off.

5.4 Travel Tips

Travel within Germany (Overnight)

On the day you should know where you want to spend the night. If you are looking in the dark for the location you may encounter unforeseen surprises. The accommodation regulations should be observed. In Germany, if there is parking permission you may stay overnight. Just two nights in one place can already be troublesome. For summary sheet listing camper friendly places in Germany please contact Westfalia.

Where to put the camper in the city?

Of course you can take a motor home in any camping site, for many, however, this would avoid the charm of this special companion. Some would prefer to stay in the centre, which eg for some countries is permitted.

Here are some tips for those who want to take their camper in the city and possibly even stay there. They will have the ideal starting point to visit museums, to attend theatre events or to allow, for example, a gourmet tour.

Many cities have a fair or festival place where twice a year they have shows. Also, for two weeks one of the clubs or a big top circus tent is set up. The remaining time the ground is free, and often sanitary facilities can also be found.

Another way to stay in cities is at sports stadiums. You will find ample parking and in most cases, park-like facilities.

Drawback: if at the weekend there is a football game then there will be a crowd for a few hours. From experience evenings and at night is quieter.

Even in smaller cities in the last years, spacious indoor swimming pools emerged with appropriate parking areas. The indoor pools usually close about 21.00 hours and in the morning will open at 10:00 hours again. Only in rare cases, does the car park operate

in the morning so this is an appropriate parking space for one night, and they are often in places with low traffic noise. If you would like stay in the city and don't mind some road noise then it would be best to stay at a guarded parking lot. Most places will be supervised until 21.00 hours or a maximum of 22.00 hours. You have a campsite in a central location with security. When you pay for the last hour, and in the morning from 9.00 to 11.00 hours, you may pay 2:50 to 3:00 DM overnight fee. Maybe you should think of paying a tip for the security. Guest houses in the suburbs often have large parking lots, especially those with so called beer gardens. Here it is sufficient in many cases to eat in the restaurant or have a drink with the family and you may get permission to stay over night on the parking lot. Advantage: man can jump from his evening drink straight into his motor home bed. Disadvantage: Often the last customer leaves after midnight.

Travel Abroad

Observe the valid regulations in the host country. The Deutschland badge is required by law and must be shown in the correct place on the rear of the vehicle..

For more recommendations and tips, please read the following brochures.

ADAC Guides Motorhome	available at ADAC
RV Adventure Trips	Westfalia-Werke
Tourism In The Motor-Caravan	Westfalia-Werke
Holiday	Press and Information Service
Tips For Your Holiday	The Federal Government
	Welckerstrasse 11, 5300 Bonn
Motorhome Logbook	Motor-Verlag
	Postfach, 7000 Stuttgart

Where to stay in Europe outside of official campsite

Country	on the road within towns		on park and recreation areas		Comments
	allowed	not allowed	allowed	not allowed	
Belgium	#		#		If not restricted by regional regulations max 24 hours
FRG	#		#		One-night. The police may have restrictions at times
Denmark		#		#	Only short stay welcome.
France		#		#	
Greece	#		#		Not allowed at archaeological sites, beaches, forests, public places. Hygiene regulations to be followed.
Great Britain	#		#		However, not advisable
Italy	#		#		No sewage and waste dump. If not restricted by regional regulations then one night.
Yugoslavia		#		#	In compliance with local authorities. Penalties expected
Luxembourg		#		#	
Netherlands		#		#	
Norway		#	#		For parking and rest areas with the approval of the police officer
Austria	#		#		
Sweden	#		#		Can be limited in time.
Switzerland	#		#		Varies in regions, it is advisable to ask the police officer or local authorities.
Spain		#	#		

5.5 Information for the Winter

The vehicle is suitable for winter, under certain conditions. If the vehicle is heated (living temperature) then the water supply system is operational even with outside temperatures of -15 C. To prevent freezing of waste water in waste water tank then a sufficient quantity of salt should be added.

An alternative recommendation is to leave the drain water tank open and if necessary, collect the wastewater in an appropriate container. At temperatures below -10 C the disposal shall be as per last recommendation above.

Note: For the gas appliances to work smoothly, please read the description of the ice-ex conditioning

When not used in winter if there is danger of frost then empty the entire water and waste disposal system.

Winter Camping

Additional equipment

Snow shovel

De-icer

Antifreeze

Snow chains

Jumper cable

To set up on winter pitches is recommended to note the following:

- release handbrake so that it does not freeze.
Better to engage the gear or put wedges under the wheels.
- Do not lay power cables on the floor, otherwise they freeze solid.
- The ground under the mobile home must keep clear, so that the heater is given sufficient ventilation. Do not allow a wall of snow to build up around the car.
- The outlet of the exhaust pipe of the heater should be kept free of snow.
- mobile home roof vent in the back area should be kept free of snow..

Note: If you need to top up your gas during a winter holiday, pay

special attention when abroad that you buy propane gas, butane gas should not be used in freezing temperatures.

Ventilation

In winter, the ventilation is particularly important. Venting is necessary due to breathing, moisture causing cooking vapours, brought in snow and wet clothes. Therefore, you need to keep the vent always free.

5.6 Behaviour during Thunderstorms

The Westfalia campers are just as safe as a normal car during thunderstorms. The supports (poptop roof) and the sheet metal reinforcements (high roof) interact with the vehicle body as a lightning conductor (Faraday cage).

We recommend:

Disconnect 220 V power supply from outside socket

Retract car radio antenna

6.0 Appendix

6.1 Installation Position of the Speakers

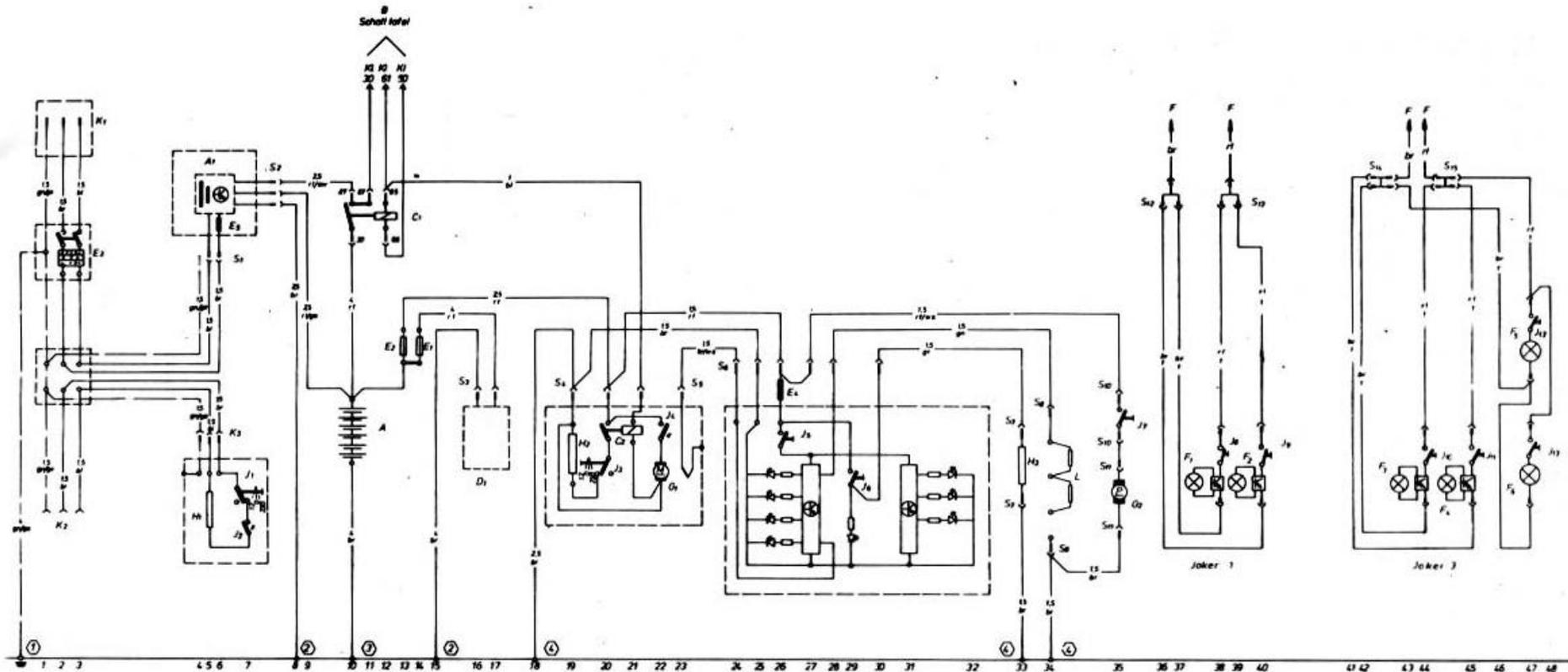
Position of the speaker cable

The speaker cables are located in the rear roof stowage box.

In driving direction they can be seen on right hand side.

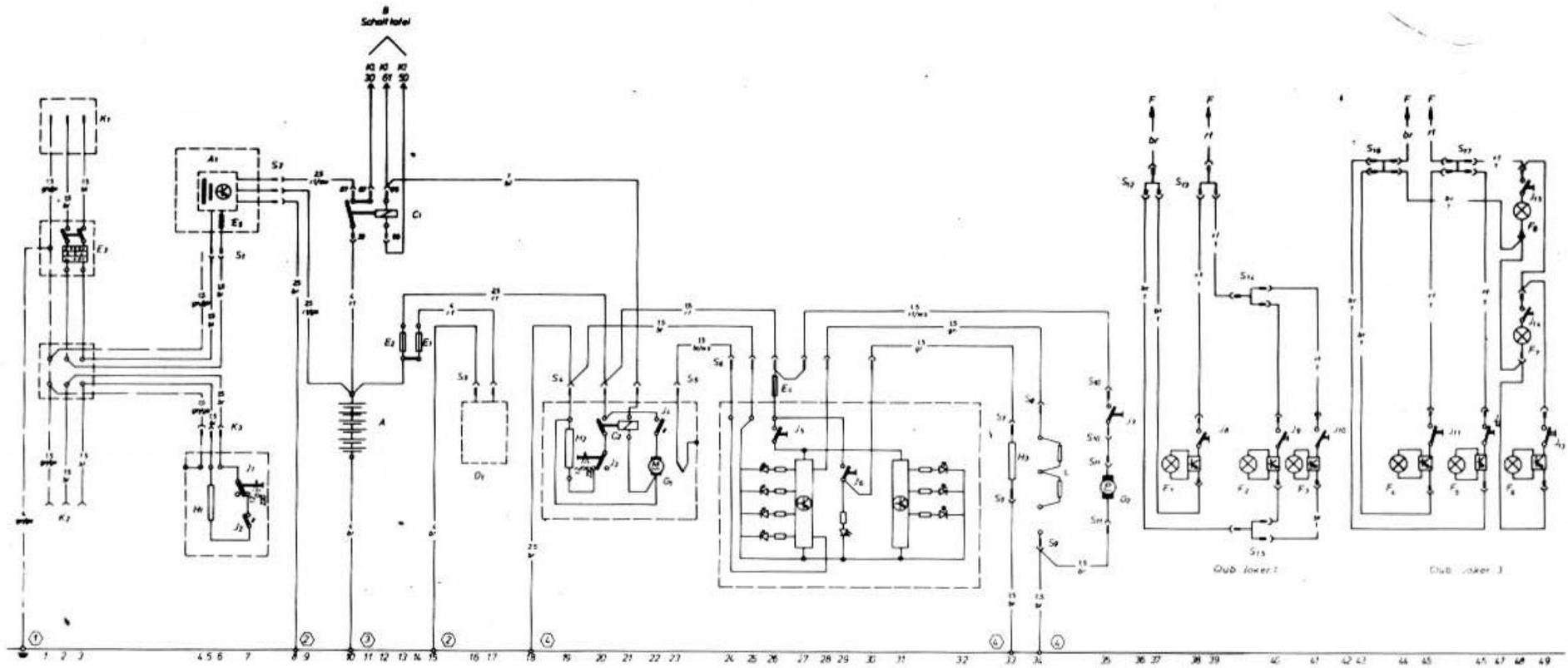
The speaker holes are predrilled and you can use a hammer to expose them and then deburr the edge of the opening.

The factory is working constantly in the development of all types and models. Please be aware we reserve the right to change our supply range, its equipment and technology. From the information, pictures and descriptions in this manual, therefore no claims can be derived.



Joker

Description	Circuit				
A	12V secondary battery; driver's seat box	10	H ₂	12V fridge heating element	19
A ₁	battery charger; bench seat	5, 6	H ₃	gas de-icer heating element	33
B	connection to the switch box; VW schematic	11, 12, 13	J ₁	220V fridge switch	6, 7
C ₁	secondary battery isolation relay; driver's seat box	10, 11, 12, 13	J ₂	220V fridge thermostat	7
C ₂	isolation relay; 12V fridge	20, 21	J ₃	12V fridge switch	20
D ₁	auxiliary heating (B2L/D2L)	16, 17	J ₄	fridge thermostat switch	22
E ₁	25A fuse (heating); on B pillar	14	J ₅	control panel switch	26
E ₂	16A fuse (fridge/pump)	13	J ₆	gas de-icer switch	29
E ₃	10mA automatic trip switch (residual current circuit breaker)	1, 2, 3	J ₇	water pump switch; tap outlet	35
E ₄	1A filament fuse; control panel	26	J ₈	integrated light switches	38 - 47
E ₅	2A filament fuse; battery charger	5, 6	J ₁₃		
F	cab interior lights	36, 38, 44, 45	K ₁	220V external plug	1, 2, 3
F ₁	strip lights	38, 40, 41, 45,	K ₂	220V internal socket	1, 2, 3
F ₄		46, 49	K ₃	220V internal socket for fridge	4, 5, 6
F ₅ , F ₆	downlights	48	L	tank water level sensor; fresh water tank	
G ₁	fridge fan	22	S ₁	2 pin connector; charger	
G ₂	water pump	35	S ₂	3 pin connector; charger	
H ₁	220V fridge heating element	5	S ₃	2 pin connector; auxiliary heating	
			S ₄	3 pin connector; fridge	
			S ₅	1 pin connector; fridge	
			S ₆	6 pin connector; control panel	
			S ₇	2 pin connector; gas de-icer	
			S ₈	1 pin connector; tank water level sensor	
			S ₉	1 pin connector; fresh water tank	
			S ₁₀	2 pin connector; tap outlet	
			S ₁₁	2 pin connector; water pump	
			S ₁₂ , S ₁₃	3 pin connectors; strip lights	
			S ₁₄ , S ₁₅	4 pin connectors; strip lights	
			①	left side wall earth point	
			②	right side earth point	
			③	driver's seat battery box earth point	
			④	left side wall earth point	



Club Joker

Description	Circuit	H ₁	H ₂	H ₃	J ₁	J ₂	J ₃	J ₄	J ₅	J ₆	J ₇	J ₈	J ₁₅	K ₁	K ₂	K ₃	L	S ₁	S ₂	S ₃	S ₄	S ₅	S ₆	S ₇	S ₈	S ₉	S ₁₀	S ₁₁	S ₁₂	S ₁₅	S ₁₆ ,	S ₁₇			
A	12V secondary battery; driver's seat box	10																																	
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F ₆		46, 49																																	
F ₇	downlights	48																																	
F ₈																																			
G ₁	fridge fan	22																																	
G ₂	water pump	35																																	

- ① left side wall earth point
- ② right side wall earth point
- ③ driver's seat battery box earth point
- ④ left side wall earth point

2162.8

Ausgabe 8/85

Westfalia-Werke Franz Knöbel und Söhne KG · 4840 Rheda-Wiedenbrück