WESTFALIA Big Nugget



Westfalia Equipment Supplementary Manual for the WESTFALIA Transit Operating Manual



Our vehicles undergo constant development and improvement. Illustrations, technical data and text information in this Operating Manual correspond to the information stage at the time of publication. Changes to the equipment in the course of further development and improvement remain reserved.

Reprinting, entering into a data processing system, or transfer by electronic, mechanical, photographic or other means must be authorised by the Westfalia Van Conversion. This also pertains to total or partial recording or translation of this publication.

This documentation was composed with utmost care. No liability can be assumed due to missing or faulty information.

Described are the total possible features at the time of publication. The description of the existing equipment is valid for your model.

Important note:

We would like to point out that "original parts and accessories not from Westfalia" are not tested and released by Westfalia Van Conversion and that we can therefore not assess their performance capability and reliability neither isolated nor in functional context with our vehicles. We can therefore assume no reliability for such products – even if there exists a technical acceptance (e.g. the German TÜV) or other official approval for individual cases.

Printed on chlorine-free paper.

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Information on operating instructions

Take some time to study this supplementary manual before your first trip. These additional instructions apply to all "Big Nugget" models including the righthand drive Ford Transit.

This supplementary manual contains important information on the operation, care and handling of the camper equipment. Furthermore you will find several tips on driving and living in your vehicle.

Competent treatment of the recreational vehicle, along with regular care and maintenance, helps to conserve its value, and in many cases is a condition of a claim under the warranty.

The many practical tips in this manual should make it easy for you to use your recreational vehicle in an ideal, safe and environmentally friendly way.

For your own safety please read the information on handling the gas system and the 12/230-Volt on-board electrical system.

All general tips for the operation and treatment of your vehicle and its equipment can be found in the Ford operating manual "Transit". This operating manual should always be kept in the vehicle, so that it can be quickly consulted if necessary. When selling your vehicle, remember to pass on this manual and all of the certificates pertaining to the interior to the new owner.

The Westfalia "Big Nugget" can be used as a family-friendly recreational vehicle, a business vehicle or a transport vehicle for bulky objects.

The vehicle is characterised by the following specific features:

- up to 5 usable seats when travelling.
- a wide bench, suitable for three persons, which can be converted to a double bed.
- a secure roof with integrated roof bed*.
- a sanitary area to the rear of the vehicle with shower, toilet and rear exit.

Information on the layout of this manual:

Directions (right, left, front or back) refer to the direction of travel, unless otherwise stated.

Items or equipment marked with (*) are standard only on specified models or are only available as optional extras on particular models.

The illustrations in this instruction manual may vary in their details from those of your vehicle. They are for illustrative purposes only.

Safety warning in this instruction a manual.

All text containing information on possible health hazards and accident and injury hazards is highlighted in this instruction manual with the word "Warning", marked with a warning triangle and highlighted with a grid.

Equipment overview - interior



This overview and the associated diagrams on the previous pages should help you to gain an overview of the main equipment in the interior.

Li	iving and working area P	age
1	Command centre	16
2	Swivel front seats	22
3	Dining table	23
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5	Kitchen block with	
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	- gas cooker	39
	- fresh water tank and	62
6	Cooler	41
7	Wardrobe / airing cupboard	43
8	Warm water boiler	44
9	Gas bottle compartment	69

The living and working area can be separated from the sanitary area. To do this, you must open the door to the sanitary area and secure it.

Sanitary area

10 Lockable swing door	50
11 Wash basin	51
12 Toilet	52

In addition to the equipment listed, there is an additional battery in the kitchen cupboard beside the fresh water tank. There is also an open storage rack above the swivel front seats. Alternatively, a roof storage box or the roof bed can be located above the front seats.

The following are accessible from the outside:

– Black waste tank 5.

- 230-Volt supply plug 58
- Fresh water fill opening 61
- Waste water tank emptying 66
- Gas bottle compartment 69

Furniture locks

The cooler covering and the doors, hatches and drawers of the cupboards are fitted with furniture locks that prevent accidental opening while travelling. To open, pull the handle button.

Opening the furniture locks is easier if you pull down the cover or door a little while pulling the handle button.



Extension cupboard

The flap of the extension cupboard can be taken out. This makes it easier to pack objects in the stowage area.

Taking out the flap

- Pull the handle button.

– Open flap (1) and pull out and upwards.

Attaching flap

- Place flap (1) with the hinge parts (arrows) onto the flap opening.
- Close flap. The lock must snap in audibly.

Warning! While travelling, objects can fall out of cupboards and drawers that are not locked, be thrown around the vehicle and injure passengers or distract the driver from traffic.

- Before beginning your journey, ensure that all covers, drawers and cupboards are closed and articles have been safely stowed.



Loading the vehicle

Compartments

The side compartments (arrows) are suitable for storing small articles during a stopover.

Before beginning your journey, remove these articles from the compartments and stow them in lockable cupboards, so that they do not fly around in case of an accident and create a risk of injury.

This recreational vehicle has been built in accordance with the latest developments in safety technology. To take advantage of this safety, the following guidelines should be observed:

- Reserve the lower storage area for heavy goods (groceries, tinned food etc.).
- The upper stowage compartments are intended for lighter articles (clothing, bedclothes etc.)
- Bedding can be stored in the compartment behind the bench.
- Bulky goods can be transported on the floor.

These goods can be secured with ropes. You will receive ropes and fastening eyelets in a fastening set through the accessories programme.

The correct way to drive a loaded vehicle depends on the kind of load and how the weight is distributed.

Transporting heavy or bulky goods can have a significant impact on driving.



Warning! When attaching accessories and loading them and when loading the vehicle the permissible axle load and total permissible load of the vehicle must not be exceeded.

- If you exceed the permissible axle load or total permissible load when loading you reduce your driving safety and the service life of your tyres. Braking and stopping distances can be significantly longer.

Please also take note of the loading plan on the following page.

Loading plan

In the interests of your own safety we recommend that you strictly observe the following maximum load values for your recreational vehicle.

 Roof storage box* front
– Cutlery drawer 1.5 kg
 Storage compartment bottom left, underneath the cooler 10 kg
– Cooler 10 kg
 Extension cabinet
 on the cloths rack 10 kg in the individual storage
compartments 10 kg
– Roof storage box left 5 kg

Note: The bottom right compartment underneath the cooler should not be used for storage. This compartment allows for ventilation of the cooler unit and the battery charger. For safety reasons, the side compartments should not be loaded during your journey.

Warning! Before beginning your journey empty all open and unlockable compartments, so that in case of an accident the stowed items do not fly around uncontrollably inside the vehicle leading to personal injury or damage to the interior.

Extending loading area

To achieve a bigger loading area, remove the bench from the vehicle - see page 33.

Sporting equipment holder*

Vehicle preparation

On the roof of the vehicle you will find two holding rails*. These are for securing a sporting equipment holder.

Note:

The roof can be loaded to a maximum of 25 kg on each side.

The corresponding Westfalia accessory (surfboard, ski or kayak holder) can be obtained from your Ford contract partner, or from Westfalia Van Conversion. Follow the instructions of the sporting equipment holder manufacturer.

Awning*

The right-hand side of the roof has been reinforced.

Right-hand drive vehicles have the corresponding reinforcements on the left-hand side.

The awning holder can be assembled in this area.

The awning and awning holder can be obtained through the accessories programme of Westfalia Van Conversion.

Ventilation

Skylight in the high roof

The skylight can be set to three different opening angles.

To open

- Press in button (1).
- Pull down the bracket on the side (2) an latch it in the desired position (a, b or c).

To close

- Move the bracket (2) back to the rear and press is up until it snaps tight.
- From the middle position (b) you can secure the bracket (2) on each side with a slide clip (3).

Warning! Due to the use of oxygen by the gas flame, a lack of oxygen can occur if there is insufficient ventilation of the recreational vehicle. There is a danger of suffocation! When cooking, open the roof window and side windows.

Note:

- When cooking, open the skylight in the living area, so that the cooking fumes are extracted.
- To avoid draughts and damage to the skylight, it must be closed and locked when travelling.
- Before closing the sliding door, open the roller blinds of the sky light. The roller blinds can be damaged from the change in pressure that occurs when closing.





Middle electric glass sunroof*

Note:

- To avoid draughts and damage to the glass sunroofs, they must be closed and locked when travelling.
- Before closing the sliding door, open the roller blinds of the glass sunroofs. The roller blinds can be damaged from the change in pressure that occurs when closing.
- Do not open the sunroofs in high winds or heavy rain.
- Remove snow, ice or other dirt from the glass sunroofs before opening.

Opening

Press button (1).
 While the button is held down, the glass roof continues opening.

Closing

- Press button (1).
 - While the button is held down, the glass roof continues closing until it snaps in.

Manual front glass sunroof*

The skylight can be opened or closed smoothly by pulling the crank handle (1).

Fluorescent lights are located in the side cover frame.

The fluorescent lights are turned on and off with switch (2).





Windows

Side adjustable windows

The side adjustable windows can be set in two positions.

They snap in automatically if you open the window slowly and evenly.

Warning! For safety reasons while travelling all adjustable windows must always be closed and locked.

- Before activating the sliding door, ensure that the adjustable window is closed. This avoids injury to persons or damage to the adjustable window.

Opening

- Press in the safety button(1) on the latch and at the same time set the lock lever (2) vertically.
- Open the window to the point it snaps in.

Closing

- To collapse the catch, close the window with a gentle tug.
- Lower the window smoothly. Set the lock lever (2) horizontally until the safety button (1) audibly pops out



Curtains

Driving cab curtains

The driving cab curtains hang loose in the vehicle. They are fastened with snap fasteners.

The driving cab curtains are secured from inside with snap fasteners (arrows). The curtains can also be secured above the windscreen by folding down both sun visors.

Roller blinds

Roller blinds for the side adjustable windows

The side windows are fitted with a visor and insect screen roller blind. Both roller blinds can be joined together and moved up or down at the same time. The visor (2) can also be moved separately and locked in place. Five rest positions are possible.

Insect screen roller blind

The insect screen roller blind (1) can be slid up and down into the visor roller blind (2) against resistance into each of the rest positions.

Visor roller blind

The visor roller blind (2) can be set to any of five rest positions.

Press the handle buttons (arrows) together briefly, at the same time slide the roller blind and allow it to snap into the desired position.

Separating roller blinds

Pull the roller blinds all the way down. Press the lock mechanism (3) of the insect screen roller blind together.

Slide the insect screen roller blind (1) up.





Roller blinds for skylight and glass sunroofs*

The visor roller blind (1) and the insect screen roller blind (2) can be hooked together and slid into any desired position.

Closing:

- Grip the end bar of the visor (1).
- Slide the end bar until it snaps in to the opposite end bar of the insect screen roller blind (2).

Opening:

- Slide the joined-together roller blinds into the "visor" position.
- Pull the end bars apart and pull the visor roller blind (1) back. Do not allow it to snap back by itself, so that the roller blind is not damaged.

Note: Before closing the sliding door, open the roller blinds of the sky light and the glass sunroofs*.

The roller blinds can be damaged from the change in pressure that occurs when closing.



Electric step*

Warning! When raising and lowering the electric step, ensure that no-one is injured.

- When activating the step switch, do not stand directly in front of the electric step.

- Only use the step when it has been completely lowered.

- When lowering the step, ensure there is sufficient space.

- When travelling, a lowered step can be damaged or injure other road users. Therefore, always raise the step before starting your journey.

The electric step makes it easier for you to come in through the sliding door

The switch for the step is on the inside of the B column, directly behind the passenger seatbelt.

Raising or lowering the step

Hold switch (1) until the step (2) has been completely lowered or raised.

Note: If you turn on the ignition when the step is lowered, a continuous tone is heard as a warning.





Central electronics

Integrated into the dashboard in the driving cab are the central electronic where you can monitor and operate all important functions.

Depending on the equipment in the vehicle, the central electronics contain the following displays, symbols and buttons:

1 - Indicator for fresh water level

The display is composed of the following five display bars. The tank is full. Only 7.5 litres of water are remaining when the lower bar extinguishes.

2 - Symbol for battery operation

The symbol appears when the additional battery is the only power supply, i.e. not while the charger or generator is charging. If the voltage falls to 10.5 V due to the activated consumers, the symbol will flash. The cooler and the supplemental heater will be switch off automatically.

3 - Display field (multifunction display)

The following appears in this display field depending on the button pressed (battery voltage is shown in the figure):

- battery voltage of the additional battery
- set heating level for the supplemental heater
- remaining time for supplemental heater
- switch-on time for the supplemental heater programmed by the timer switch
- set cooler temperature
- outside temperature
- interior temperature
- current time of the digital clock

If there is a malfunction, the following is displayed:

- a fault in the supplemental heater is indicated by an error code e.g. F13 overheating.
- flashing display for battery voltage if there is a malfunction in the 230-Volt system or when the charger malfunctions.

4 - Symbol for 230 Volt mains voltage and charger

This symbol appears when there is mains voltage and the charger is operating. This symbol disappears if there is a power failure or the charger malfunctions.

Note: If the battery voltage indicator flashes while mains voltage is available and displays a value of more than **15 Volt**, then there is a malfunction. Disconnect the power supply and contact a Ford service centre.

5 - Symbol for supplemental heater operation

This symbol appears as soon as the supplemental heater is switched on. If the supplemental heater has been switched on by the timer switch, symbols 7 and 8 will also appear.

The symbol will flash if there is a fault. A fault code (e.g. **F13** overheating) will appear in display field 3. See the malfunction table (page 92), call Bosch Service or contact Eberspächer Service.

6 - Indicator for waste water level

The fill level is shown with three bars. When the tank is full the three bars are displayed and the symbol flashes. After pressing any button the flashing switches to a continuous display.

7 - Symbol for timer

This symbol appears as soon as the timer switch is switched on. Symbol 7 will extinguish after you have switched it off.

8 - Symbol for the start times for the supplemental heater

Each number (1, 2 or 3) represents a previously set switch-on time. For example, if there is a number, this means that you have programmed a switch-on time for the supplemental heater.

The timer switch is activated only when the number remains visible in the display field together with the 7 symbol and the supplemental heater starts up at the programmed time.

9 - Indicator: Capacity of the additional battery

The available battery capacity is shown in steps of 10%.

During battery operation the display appears for the first time about 5 minutes after a consumer has been switched on. Only the first and last bar symbols are displayed beforehand.

10 - Symbol for cooler operation

The symbol appears as soon as the cooler is switched on. The symbol will flash if there is a fault.

11 - Pushbutton for outside and inside temperature

After pressing this button, the outside temperature is shown in display 3 until you release the button. After button 11 is released, the inside temperature is displayed. The display "Inside temperature" remains until you press button 15.

12 - Display supplemental heater switchon times

When you press this button repeatedly, the numbers 1, 2 and 3 will appear one after the other in position 8 with the respective programmed switch-on times in display field 3. If no switch-on time has been programmed, then 0:00 o'clock appears.

13 - Cooler on/off

The supplemental heater is switched on or off by pressing buttons 13 and 17 simultaneously. The symbol 10 will appear after it is switched on. It will extinguish when switched off.

Note: If the cooler is switched on again right after it was switched off, then the cooling will start again after a 5-minute delay.



Setting the cooler temperature

Hold down button 17. Press button 14 to raise (button 18 to lower) the desired temperature in the range of -20° C¹⁾ to $+20^{\circ}$ C by 1 degree Celsius at a time. The temperature entered appears in display field 3.

1) Identifies an atmospheric temperature of +20°C.

14 - Pushbutton for "Cooler temperature" and "Heating level" supplemental heater warmer

The typed-in cooler temperature appears in degrees Celsius in display 3, if you press button 17 at the same time.

Or the heating level of the supplemental heater appears, if you press button 16 at the same time.

15 - Pushbutton for additional battery voltage

The battery voltage will appear in display field 3 when you press this button. The display remains visible until you press the button 11.

16 - Pushbutton for heating level of the supplemental heater

The heating level of the supplemental heater will appear in display field 3 when you press this button.

17 - Pushbutton for set cooler temperature

The set cooler temperature will appear in display field 3 while you press this button.

18 - Pushbutton for remaining time of the supplemental heater

Pressing this button briefly will call up the remaining time for the supplemental heater when activated by the timer switch. If you press this button for longer than one second, the running time will be reduced. The heater has to have been running for at least one minute before you can reduce the remaining time.

With this button you also reduce the cooler temperature or the heating level of the supplemental heater (operation correspondingly as button 14).

Illuminating the display

The indicators will be illuminated for about 3 minutes when you press any button. The lighting is also linked to the instrument lighting on the base vehicle.

The display remains illuminated while the supplemental heater is under operation.



Supplemental heater (manual initial startup without timer switch)

Warning! The supplemental heater should not be turned on in enclosed spaces. Danger of poisoning!

Switching on the supplemental heater

The supplemental heater is switched on by pressing buttons 13 and 16 simultaneously. It will then be in continuous operation. Symbol 5 will appear in the display field when the supplemental heater is switched on.

Setting the supplemental heater level

To set the required heating level hold down button 16 and increase the heating level in single steps ranging from 10 to 30 by tapping button 14 (button 18 to decrease) at the same time.

If you set the heating level while the supplemental heater is running, it will take a while for the new setting to take effect. **Note:** The air vent of the supplemental heater is located underneath the passenger seat.

Do not use this area to store plastic bags, cases or other objects as you may block the air intake opening and the supplemental heater will switch off.

The warm air extractor, below on the right B column and at the bottom of the clothes wardrobe must also not be locked, as otherwise the supplemental heater will switch off.

Switching the supplemental heater off

Warning! The supplemental heater must be switched off when refuelling.

Press buttons 13 and 16 simultaneously to switch off the supplemental heater.

Symbol 5 will disappear from the display field.

After switching off the heating unit, the fan continues running for a short while so that the heating unit cools off quicker.

You do not need to wait for the fan to stop when you are refuelling.



Timer switch for supplemental heater

The supplemental heater will only start at the programmed switch-on times when the digital clock is properly set and the timer switch is activated.

Setting the current time

Press buttons 12 and 16 simultaneously. The clock will be called up and a time will appear in display field 3 with a flashing "colon".

You can also set the current time by pressing buttons 14 and 18. (In the first 5 seconds in steps of 1 minute, then in 10 minute steps.)

Release the buttons once you have made the setting. The current time will remain in display field 3 until you press any button.

Programming switch-on times

The correct time has to be set before you program the switch-on times.

Select one of the numbers in position 8 under which the switch-on time is to be programmed with button 12. Hold down button 12 until the required switch-on time is set.

Set the desired switch-on time for the supplemental warm-air heater by tapping or holding down buttons 14 or 18. (In the first 5 seconds in steps of 1 minute, then in 10 minute steps.) After the button is released the start time is saved under the corresponding figure.

Please note that the switch-on time is only pre-programmed and the supplemental heater cannot start yet. If you press button 12 again, you can program another switch-on time for the next number.

Switching the timer switch on (activate)

You should be able to see a number in position 8. Now press buttons 12 and 13. Symbol 7 appears. The supplemental heater will start at the programmed time and symbol 5 will appear.

When the ignition is switched off, the supplemental heater will run for a maximum of 2 hours after each programmed switch-on time and will then switch itself off again.

Up to three switch-on times can be activated per day. These times run consecutively- independent of the order they were programmed in.

The supplemental heater will start each day at the programmed time as long as symbol 7 and a number in position 8 can be seen.

Switching the timer switch off (deactivate)

The timer is turned off with buttons 12 and 13. The symbol 7 disappears.

If the supplemental heater was at that time operating by the timer, the symbol 5 also disappears.

Swivel front seats (front seat)



Warning! Adjust seats only when the vehicle is at rest.

- The front seats must always face the direction of travel and be securely fastened.

- The seat lock must audibly snap in.

The front seats can be turned and used as part of the living area.

Front seats moving

- Pull the bracket (1) up in the direction of the arrow. Push the seat forward or back in a longitudinal direction at the same time until it latches.

Adjusting the tilt of the seat

- Pull up the handle (2) and set the desired tilt by shifting your weight.

The grip (6) has no function. It is not needed for setting the seat.

Swivelling the front seats

Secure the vehicle against rolling away (put into gear or engage parking brake).

- Put backrest into upright position.
- Align the seats centrally on the turning console.
- Pull up handle (3), turn the seat at the same time and then release the handle (3).
 The swivelling direction is always towards the middle of the vehicle.

Adjusting the tilt of the backrest

 Pull up the grip (4) and simultaneously adjust the tilt by leaning with your torso.





Adjusting the Armrest

The angle of the armrest can be adjusted continuously with the knob (5). Before adjusting the armrest, loosen it by gently lifting it up.

Dining table

Warning! For safety reasons, the dining table may not be used while driving. It must be stowed while travelling in the holder (to the rear) provided for this purpose.

– Never travel with a lowered dining table.

The dining table folds together in a holder between the sanitary area and the rear door.

Taking the dining table out of the holder.

- Press against the table board (1) in the upper area and at the same time turn the catch (2) by 90°.
- Take the tabletop (1) out of the holder.

Folding out the dining table

- Hang the table board (1) onto the holding bar (arrow) on the side wall.To hang the table board, it must be lifted up a little at the front.
- Loosen the table leg (3) at the bottom of the table (velcro).
- Swing the table leg (3) until it catches downwards.
 The table leg (3) snaps in.

Folding back the dining table

- Raise the table board (1) on the table leg side by about 45°.
- Press in the safety button (4), and swing the table leg (3) all the way across the table board (1).
- Take the table board (1) upwards out of the holding bar.

Then replace the table board (1) back into the holder provided.

Note: The unfolded table can take a maximum load of **25 kg**.







Swivel tables*

Warning! For safety reasons, the swivel tables may not be used while driving. You have to remove the table board before driving and store them in the designated table receptacles.

The table legs and a table board can be found in the clothes closet. A further table plate is stored under the seat cushion of the bench.

Preparing the swivel tables

- Open the wardrobe door.
- Press against the table board (1) in the upper right area and at the same time turn the catch (arrow) by 90°.
- Take the tabletop (1) out of the holder.
- The table legs (2) are just clamped in. You can snap them out easily.

The second table board can be reached as follows:

- Swivel the seat cushion up and secure it with the brace.
- Turn the lever (3) by 90° up or down.
- Take the table board (1) out of the retainer.

Swivel tables unfolding

The tables behind the front seat are unfolded in the same way. The description is for unfolding behind the left front seat.

- Insert the table leg (2) into the holders (arrows) on the B-column.
- Swivel the table leg (2) into the desired position and clamp it tight by turning the locking bolt (4).
- Open the clamping jacket below the table board and slide the table board (1) onto the table leg.
- Align the table board horizontally and clamp it tight by turning the locking bolt (5).







The table holder below the table board is constructed so that is can swivel. You can adjust the table board to your needs.

- Loosen the clamp by turning the locking bolt (6).
- Swivel the table board into the desired position and clamp it tight again by turning the locking bolt (6).

Note: The locking bolts used at the swivel table can hinder each other during the turning. In this case, pull the respective lever in the direction of the arrow and swivel it into the desired position. After releasing the level, it snaps back into position.

Warning! Position the locking bolt (4) at the lower holder so that the grip points downwards. This prevents injuring a foot by bumping and you also don't get caught by your trouser leg.

Folding back the swivel tables

The tables are folded back by following the steps in reverse order. Then replace the table board (1) and the table leg (2) back into the holders provided.

Note: The unfolded tables can take a maximum load of **10 kg**.



Umbrella holder

A strap is located at the side of the extension cupboard. This strap allows an umbrella to be attached.

To loosen the strap, pull on the upper part of the lock (arrow) at the same time lightly press against the bottom part of the lock.



Seatbelts

The three-point automatic belt on the bench has the following features:

The belts are each fitted with two guides of different sizes. Corresponding to the inserts there are six seat belt locks located on the seat case.

Warning! The belts must be fastened by each passenger before every journey.

- When using the seatbelts, ensure that both locking guides are securely fastened into the belt locks - pull to check!

- To fasten the belt, the insert at the end of the belt strap has to be inserted into the belt lock (arrow), which has a cover.
- After that the belt can be fastened as usual.

Note:

- To prevent accidental release of the button, the cover must always surround the lock.
- When the bench/bed is in travelling position the seat belts ought to always be resting on the seat padding so that they can be put on at anytime.



Bench/bed

Warning! For safety reasons, the bench must always sit in the guide rails and be snapped into position 1 when travelling, to avoid a safety risk in case of sudden braking or an accident.

In addition, the function of the seat belts depends upon the bench being securely fastened!

The bench/bed may be used only in position 1 while driving:

- Position 1 Driving position
- Position 2 Latch position for the conversion into sleeping position.



Bench shifting

– Press the lever (1) to the side and hold it.

- Slide the bench and release the lever (1). Let the bench latch into the desired position afterwards.

The bench/bed can be adjusted in two ways:

- by shifting the bench by your body (as usual for car seats) or
- by shifting it by hand when standing in front of the bench.

Grasp upwards into the left and right hollows, so that your finger reaches the metal bars positioned further back.

Note: To enable the bench to slide easily along the guide rails, the T-shaped slide block of the bench should be cleaned occasionally and treated with a non-oily lubricant (e.g. silicon spray).



Bench folding out (sleeping position)

The unfolded bench together with the extra cushion provides room for two people to sleep.

Warning! For safety reasons, the unfolded bench must not be used when driving.

Moving the seat belts out of the way:

- Unfasten the belts from the seatbelt locks.
- Push belts through between headrest and back rest.
- Push belt locks through between headrest and back rest.
- Slide both front seats (swivel seats) all the way forward.
- Push the bench forward until it latches "sleeping position".
- Swivel additional padding (3) up into reclining position.
 At the same time the padding extension (4) is swivelled up with it.
- Loosen the tube bracket (5) clamped below the padding with a slight tug.
- Afterwards brace the tube bracket (5) into the retainer located in the bench housing.







- Press the unlocking lever (2) to the side and at the same time lift the seat cushion forward a little.
- Reach into the handle recesses below the seat padding, pull the seat padding forward and press the back rest to the rear at the same time.

Note: Make sure that none of the objects in the storage space get caught.

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Bench raising

- Lift the seat padding (6) until you can hear the seat hinge latch in.
 The seat padding and back rest should now be almost at a right-angle to one another.
- Press the seat padding down; the back rest should rise up again thereby.
- Let the seat padding latch firmly into the locking mechanism.
- Swivel the tube bracket (5) back under the additional padding (3) until it latches and lower the additional padding.
- Slide the bench back until it latches and prepare the seat belts again (see page 27) so that passengers can fasten them again at any time.
- Push both front seats back into driving position.

Storage space under the bench/bed

The space under the seat padding can also be used for storage space. The seat padding can be held in open

position using the brace (1) on the seat case. For that the holder has to sit securely in the notch of the brace (arrow).

Note: Swivel the armrest up before folding up the seat padding.



Bench dismantling

Warning! For safety reasons, the bench must always sit in the guide rails and in be snapped into position 1 (see page 28) when travelling.

Passengers - especially children must always be only in the seats while the vehicle is being driven. Everyone must be properly fastened in their seat.

- Separate the belt straps from the buckles of the seat belts.
- Slide the bench forward up to the forward openings.
- Swivel the seat padding up and secure it with the brace (1).
- Press and hold the button (2) and carefully push the bench forward until the latching hook located under the seat case rests on the guide rail.
 Keep button (2) pressed and push the bench back slowly until the button (2)

remains pressed down by itself. – Push the bench further to the rear until

you can lift the bench out of the guide rails in the area of the openings.

Warning! The bench is heavy 64 kg. To avoid injuries and damages it is recommended that you remove and mount the bench only with the help of other persons.

Folding up the bench

Mounting the bench/bed is in reverse order. Before folding up the bench, clean the guide rails and the T-shaped slide block.



- Place the bench on the guide rails.
- Slide the bench forward until the lock hooks hook in to the guide rails. Button (2) pops up.
- Slide the bench back into the desired position.

Ensure that the bench is secured in the guide rails and snapped in.

Roof bed*

The roof bed can accommodate two persons.

Warning! If the safety net for the roof bed is not installed, the roof bed may not be used.

- Children under 6 years should not be permitted in the roof bed unsupervised. This applies even when the safety net is installed.

The bed board can be swung upwards. This gives you more head room when using the living area of your vehicle. The bed board should also be swung up before beginning your journey.

It is then secured by the design of the hinge, the rear safety rope and the side locks.

The safety net does not have to be removed to swing up the bed board.
Roof bed

Warning! For safety reasons, persons may not be in the roof bed when travelling. The bed board has to be swung up and securely hooked in.

Lowering the bed board

- Press the bed board (1) up slightly and thereby unhook the holding belts (2) on the left and right.
- Pull the bed board (2) back and down at the same time, until the bed board is in an even, horizontal position.

Note: So that the bed board does not lie on the back rests of the front seat and possibly caus dammage, tilt the back rests forward slightly before lowering the bed board. They should not be in vertical position.

Swing bed board upwards

- Push the bed board (1) up slightly in the front area (arrow).
- Push the bed board (1) fowards and upwards at the same time.
- Hook the bed board (1) securely into the holding belts (2). Pull to check!

The safety net does not need to be removed - see page 36.

How do get onto the roof bed?

Loosen the safety net as much as necessary. Step on the recess of the kitchen cupboard, underneath the sink and hold on to the end of the bed board.

Then climb carefully onto the kitchen cupboard beside the sink.

But be careful, the surface of the kitchen cupboard is smooth - danger of slipping!

You can also use a ladder that is available as an accessory to make it easier to reach the roof bed.





Climbing down

Never jump from the bed onto the surface of the furniture - climb down carefully. Avoid standing on the glass cover of the cooker. Danger of breaking!

Safety net for the roof bed*

If people are sleeping in the roof bed, the loosely attached safety net should be affixed as follows:

Note: The safety net must not be removed when the bed board is swung up.

Connecting thesafety net

- Securely button the safety net all the way around the bed board underneath the cushion.
- Then press the holding clips until they snap into the side holders (arrows).

The safety net is removed by following the steps in reverse order.

To get into the roof bed when the safety net is connected, simply unhook the safety net from the holder at the front on one side.



Sink

The sink is fitted with a mixer tap.

The tap (1) can be moved. You can move it to the side to make it easier to put dishes in the basin.

To turn on the water pump, move the upper part (2) upwards a little.

A water pump located in the fresh water tank then provides water to the tap.

You will have warm water if you:

- have turned on the warm water boiler page 45.
- press the upper part (2) in the direction of the red area.

The water pump is switched off by pressing down the upper part (2).

Notes: Do not allow the water pump to run dry for a longer time as it will be damaged. The glass cover of the stove may not be used as a drying rack.

Filling the fresh water tank – page 61. Emptying the waste water tank – page 66.



Drain

If the water trap under the sink becomes clogged, it can be cleaned as follows:

- Push the bench all the way forward and remove the covering beneath the sink (unscrew four screws)
- Unscrew the screws (arrow) all the way out and remove the upper part.
 Hold the lower part of the drain at the same time. Grab on to the front of the kitchen cupboard in the recess.
- The drain can now be cleaned. Ensure that the lower part is tightly connected to the outflow pipe.

Note:

To catch any water that may leak, a suitable container should be placed under the lock.



Gas cooker

General information



Warning! Always ensure adequate ventilation when using the cooker.

- The cooking flame must not be used for heating.

Due to the use of oxygen by the flame, a lack of oxygen can occur if there is insufficient ventilation of the recreational vehicle

– If it is not being used for an extended period, and before every journey, the gas shutoff valves must be closed

– Ensure that the gas cooker, warm water boiler and supplemental heater are turned off when refuelling.

Each grate can easily be removed for cleaning the cooker - they are only clamped on.

To ensure optimum energy use, the following should be observed:

- Pot size 16 20 cm diameter.
- The pots should not have a curved bottom.
- Place the pots in the middle of the flame.
- The flame should not reach over the edge of the pot.

Warning! The following safety instructions must be followed:

- Ensure that no flammable food particles, e.g. fat or oil, are near the flame.

- Tea towels, clothing, paper, pieces of wood or other flammable material must be kept away from the cooker. This also applies to pieces of plastic, which can not only burn but also melt.

- Do not heat oil or fat too much - danger of burning!

- Turn the handles of pots and pans in, so that nothing can be knocked off the cooker

- Never leave the cooker unattended, particularly when there are children in the vehicle!

- Only use dry oven gloves to handles hot pots or pans. Damp oven gloves can become very hot and lead to burns!

– Do not lower the cooker lid while the cooker is being used.

- Always lower the cooker lid before beginning your journey, so that it does not fall down and become damaged while travelling.

Before cooking you must open the following gas shutoff valves:

- Main shutoff valve on the gas bottle - see page 70.
- Shutoff valve for the gas cooker - see page 70.

Note: If all valves are open and there is still no gas at the cooker, check the gas supply.

Lighting the burners:

- Raise the cooker lid (1).
- Press in the knob (2) of the desired burner, turn to the left and keep the knob pressed in.
- Light the gas at the side of the burner.
- If the flame lights, keep the knob held for 15 more seconds to temporarily override the safety mechanism.
 If the knob it released too soon, the flame extinguishes, but it can be re-ignited
- again immediately.
 When the burner remains on after the knob is released, the flame can be regulated by the knob (2):
- Symbol "large flame" maximum position
- Symbol "small flame" minimum position

End cooking:

- Turn knob (2) all the way to the right.
- Close shutoff valve for the gas cooker see page 70.
- Lower the cooker lid (1) again.





Cooler

General tips for operating the cooler

- Cool the cooler before storing groceries and drinks in it.
- Only take the articles to be stored out of the household fridge shortly before beginning your journey. Never put hot items in the cooler when switched on!
- Place groceries and drinks in the cooler in tightly-sealed containers.
- To make it easier to load and unpack the groceries, you can obtain an additional cooler insert with holders as part of our range of accessories.

Advantages:

- Groceries don't dry out.
- Drinks do not evaporate and are also not spilled during the drive.
- No odours are emitted.
- The formation of condensation (ice) on the side walls is slowed. Ice forming on the side walls significantly reduces the effectivity; increased electricity consumption and less cooling are the result.

Too much ice formation is also caused by frequent opening of the cooler.

- The containers ought to be small, because several smaller containers can be more easily stored than few larger ones.
- The cooler should also not be packed too full so that the circulation of the refrigerated air is not blocked.
- Cleaning the cooler see page 74.

Filling the cooler

The cooler can be reached by opening the flap. The flap is held open by a brace (1) on the side so that you can easily put refrigerated food in or take it out.

To close the flap, lift it slightly, fold the brace (1) away and lower the flap.

Before using the cooler for the first time, clean the inside with lukewarm water and a mild detergent.

The cooler works regardless of location and independent of the motor and ignition. The cooler is operated exclusively by the maintenance free additional battery. **The cooler is switched on and off and controlled through the central electronics** – see page 17.

The cooler insert is not included in delivery. You can obtain the insert through the Westfalia Van Conversion accessories programme.



Kitchen cupboard

In the kitchen cupboard, to the left and underneath of the cooler is a handy spice rack.

By pressing the handle button you can pull out the spice rack and fill it with spices as sold in the shops.

Wardrobe / airing cupboard

The wardrobe / airing cupboard located on the right at the rear of the vehicle also houses the warm water boiler. The cupboard contains compartments for storing small articles of clothing. The wardrobe also contains a clothes rail. The clothes rail can be reached by opening the door (arrow). Dresses and suits can be easily hung on the rail.

At the bottom of the wardrobe is the gas bottle compartment, which can be reached after opening the rear door.

Roof storage box* front

A spacious roof storage box can be located above the front seats. In this case there is no roof bed* installed in the vehicle.

Compartment above swivel front seats

Depending on the model, an open compartment is located above the front seats.





Warm water boiler

The ignition, operation and water temperature are monitored and controlled electronically.

The control panel of the warm water boiler is located in the side wall of the wardrobe above the airing cupboard.

- 1 Switch for the warm water boiler (on/ off)
 - a: switched on
 - b: switched off
- 2 Control button for water temperature in the warm water boiler.During operation the control button is lit by a green control light
- 3 Red control light: error display

Note:

- Before using the warm water boiler the flue cover (back right of the vehicle) must be removed and
- the boiler filled with water.
- Check whether the safety valve has been closed again after the last emptying of the water system –see page 63.



Warm water boiler filling

Open the tap of the kitchen sink or the sanitary area and press in the direction of the red area.

The water pump is now turned on and fills the boiler.

As soon as the water flows out without air bubbles, the boiler is filled and the tap can be closed.

Turning on

- Remove the cover cap for the gas flue vent of the warm water boiler
 -see page 68.
- Open the gas shutoff valves
 see page 70.
- Turn on the warm water boiler with the switch (1). The green control light lights up.
- With the control button (2) you can adjust the desired water temperature to between approximately 30° to 70°C.

When switched on the boiler remains ready for use. The electronics turn the burner on and off automatically.

The red control light (3) lights up when an error is present –see page 93.

Turning off

- Turn the switch (1) around to the left until it stops. You will have to overcome some light resistance.

Interior lights

Lights are installed in the following locations in the vehicle:

- in the window panelling above the dining table,
- in the bottom of the wall unit above the cooler,
- in the sanitary area,
- in the panelling above the right window (right-hand drive vehicle),
- LED-lights* below the bed board

There are also fluorescent lights built in to the side of the frame of the front glass sunroof*.

Reading light above dining table

The reading light above the dining table has the following settings:

- 1 Spotlight left Flip switch on/ off.
- 2 Light middle Flip switch on/ off
- 3 Spotlight right Flip switch on/ off.

Turn each light on by pressing the corresponding flip switch down on one side. If the flip switch is in the middle position, the light is off.

Halogen spot lights above the cooler

Two halogen spot lights (1) are located at the bottom of the wall unit above the cooler. The lights can be turned on and off with the switch (2).





Light in the left side wall panelling

You can adjust the lights in the left side wall panelling below the dining table with the switch (1) in the following way.

- Constant use
- Off
- The light is turned on and off by the door contact of the sliding door.

Fluorescent light in the sanitary area

Note: You can turn the light in the sanitary area on and off from the switch (1) located on the outside on the wardrobe, if you have previously turned the light on directly at the light.

The fluorescent light above the mirror can be turned on and off with the switch (2) directly on the light.







Fluorescent light* above the right window

A fluorescent light is located in the panelling above the right window.

The fluorescent light is turned on and off with the flip switch (1).

The light diffuser panel can be turned up or down inside the side holder. The total usable adjustment angle is approx. 180°.



LED-lights* below the bed board

The lights can be directly switched on or off individually with the side switch of each light.

Note: You can turn the LED lights on or off centrally with the flip switch if you have previously turned the lights on directly at the light.

Switches for LED lights

The flip switches for the LED lights are located in the side wall of the left-hand roof storage box.

Sanitary area

Lockable swivel door

Warning! If the swivel door is not locked while travelling, items can be flung around on sudden braking or in an accident, leading to serious injuries to passengers. It therefore must be closed and locked when travelling.

- Never drive with an open, unlocked swivel door.

The toilet room can be closed with the swivel door. Entry to the rear is possible. The sanitary area can also be separated from the living and working area. You then have a spacious washroom in which you can also shower.

The door lock snaps in with a spring. To open the door, turn the door handle to the left or right.

Note: Before beginning your journey, ensure that the door lock is securely snapped in. Pull to check!



Wash basin

Turning on the tap and adjusting the desired water temperature is done with the controller (1).

The tap (2) can be pulled out and used as a hand tap or as a shower head.

To use as a shower head, pull out the tap (2) and hang it up into the holder (3) provided. The holder is located above on the swivel door.

Shower curtain

You can protect the cabinet from water spray by attaching the shower curtain with the loops at the points provided (arrows).

The shower water flows into the waste water tank through an opening in the floor.





Clothes line*

A retractable clothes line (1) is located behind the flap at the top of the wardrobe. After opening the swivel door, you can hang this clothes line (1) on the other side of the toilet room in the holders (2).

After hanging up the clothes line (1) it retracts automatically on a spring.



Toilet

In the sanitary area there is a toilet fitted with a removable black waste tank and an electric water drain.

Before first use

Take out the black waste tank as described on the following pages and lay it horizontally on the ground.

Swivel the outflow pipe (1) upwards and unscrew the lock (2).

Add toilet chemicals as specified by the manufacturer and fill with approximately 2 litres of water.

Environmental tip:

Following the manufacturer's instructions carefully when adding chemicals. Never exceed the stated amount of chemicals, as this can lead to an unnecessary destruction of bacterial cultures in communal sewage treatment units.

Close the outflow, swivel the pipe back down and slide the black waste tank back into its holder.

Flushing water

The water flush receives the necessary water from the fresh water tank.

The flush is operated by pressing in the flush button (1).

If you pull the valve handle (2) forward at the same time, the toilet floor opens. The waste water flows into the black waste tank and the flush cleans the toilet.

To stop the flushing, stop pressing the flush button (1).

Close the toilet floor by sliding back the valve handle (2).

Fill level display

The fill level display (3) lights up when the black waste tank needs to be emptied.





Removing and emptying the black waste tank

Environmental tip:

- You may only empty the black waste tank in specially provided disposal stations.
- The black waste tank of the toilet must not be emptied in public waste water or rain water systems.

Note: The black waste tank can only be removed when the toilet floor is closed.

- Open the rear doors.
- Press the retaining clip (4) upwards and pull the black waste tank out of the holder horizontally by the carrying handle (5).
- Hold the tank vertically downwards by the carrying handle (5) while you carry it to the disposal station.
- Place the black waste tank on the ground, swivel the outflow pipe (6) upwards and unscrew the lock cap (7).
- Hold the tank by the handle (8) and underneath the container while emptying.
 While pouring out, press on the air valve (9) until the tank has been emptied.
- After emptying, clean the black waste tank inside and out.
- Add toilet chemicals as specified by the manufacturer. Close the outflow pipe and slide the black waste tank back into the holder until the holder clip (4) snaps in





Sockets

There are four shock-proof sockets for 230-Volt equipment with a maximum power input of 2000 Watts.

The sockets are located at the following points:

- in the roof storage box above the cooler.
- at the side of the extension cupboard beside the sliding door.
- at the side of the wardrobe, above the airing cupboard.
- above in the wardrobe beside the clothes line*.

The figure shows the socket (1) in the floor of the roof storage box above the cooler.

Note:

- These sockets are fitted with a child safety lock. This means a certain amount of resistance can be felt when plugging in a plug.
- The 230-Volt sockets can be used once the mains have been connected and the fault current breaker is switched on.
- Please note that the campsite connection may only be fused with 4 - 8A. In this case you may only use equipment with a maximum power input of 920 - 1840 Watt.



12-Volt socket

For 12-Volt equipment with a maximum power input of 90 Watts there is a socket at the base of one of the front seats.

 Another 12-Volt socket is located underneath the glove compartment – see the Ford operating instructions "Transit".

Notes: The 12-Volt socket below the glove compartment is powered by the starter battery.

The 12-Volt socket at the base of the front seat is powered by the additional battery.

You should be aware that for longer periods of inactivity without recharging, the operating time of the consumers is limited depending on the starter or additional battery's charge state.

Fault current breaker

The fault current breaker (FI circuit breaker) is located behind a lockable flap that is attached at the left side panel below the kitchen cabinet. To access the switch, slide the bench/bed

forward.

Opening the flap

- Unlock the locking mechanism by turning the lever (1) upright – view A.

Closing the flap

- Swivel flap up, press slightly and turn lever (1) back again.

This fault current breaker serves not only to protect persons but the electrical network as well.

For your personal protection the circuit breaker shuts down at a fault current of 10 mA.

For circuit protection, the shut down happens if overloaded (over 13A) or in the event of a short circuit.

The circuit breaker is on if the trip switch (2) is up.

After an ordinary 230-Volt connection to the vehicle is made, the function of the fault current breaker can be tested by pressing the white test button (3).

The trip switch (2) must then pop down. To turn back on, press the trip switch (2) back down.

Warning! After each connection to the 230-Volt supply, the circuit breaker should be checked in this way.





Electrical system

There are two separate power supply circuits in the vehicle:

- 12-Volt direct current
- 230-Volt alternating current

12-Volt circuit

The following consumers in the living area are supplied by the additional battery through the 12-Volt circuit:

- Cooler
- Supplemental heater (only for steering and fan functions).
- Water pump.
- Interior lights see page 46.
- Central electronics see page 16.
- 12V sockets see page 55.

Note: You should be aware that for longer periods of inactivity without recharging, the operating time of the 12-Volt consumers is limited depending on the additional battery's charge state.

230-Volt circuit

Warning! Work on the 230-Volt circuit should only be carried out by qualified professionals.

The following devices in the vehicle are supplied by the 230-Volt circuit:

- the 230-Volt sockets see page 54.
- the battery charger see page 58.

Note: The devices supplied from the 12-Volt circuit can also be supplied indirectly from the battery charger.

 To retain the capacity of the additional battery, it must be charged at regular intervals from the 230-Volt connection. This is valid especially then when the vehicle has not been driven for for some time, for instance after a winter break.

Supply plug

The 230-Volt supply uses a plug and coupler conforming to CEE 17 (European Standard).

The supply plug is located in the rear on the left-hand side of the vehicle. Connect to the power supply as follows:

- Unlatch the flap cover (1) below and swivel up.
- Plug the coupling of the power line to the supply plug. For that the coupling's flap cover needs to be raised until it latches behind the nose on the plug.
- Lower the flap cover (1) to protect the connection.

The plug connection is disconnected in reverse order.

Push the blue lever (arrow) down before you disconnect the coupling so that the flap cover of the coupling is unlatched.

Battery charger

The battery charger is located in the kitchen cupboard, beneath the cooler. It functions completely automatically:

As soon as the circuit connection is established and the fault current breaker is switched on, the charger charges the gel additional battery as well as the starter battery and keeps the charge level near to constant as soon as the maximum charge is reached.

Notes: While driving all batteries are charged from the generator of the motor.

 After longer periods of inactivity without recharging, the capacity of the battery is limited.

How to check for the charge level of the additional battery is described on page 17.



Charging procedure

The charger works for the gel additional battery with a charge output of 12 Aand also with 2 A for the starter battery.

The charge characteristics for the gel additional battery correspond to 3 level charge (IUoU curve).

The charge characteristics for the starter battery correspond to 2 level charge (IUoU curve).

The charge voltage of the gel additional battery varies depending on the battery temperature. The temperature is gauged by an external temperature sensor.

I Phase: The empty battery is charged with constant current until the preset battery charge is reached. The charge current reduces gradually.

UO Phase: The main charge phase is limited to a maximum of 4 - 8 hours. The charge current increases to its maximum value. It remains constant as long as the preset battery charge has not been reached. Once the preset battery charge is reached the charge current reduces again.

U Phase: If the current falls below 10% of the nominal current or if the time limit of 12 hours is exceeded, the charger switches to maintenance charging.

Additional battery

The additional battery is located at the bottom of the kitchen block behind the bench.

It is covered by a board (1), located under the cushion (2).

The additional battery is maintenance free and safe from deep discharge for at least 4 weeks. However it must be charged within this time frame.

In case exhaustive discharges take place for more than 8 week, then the battery may be irreparably damaged.

You will avoid deep discharge if you remove the fuses for the following 12-Volt devices after charging:

- 1 central electronics, water sensors
- 2 water pump, 12-V socket
- 5 Supplemental heater and
- 6 cooler, step, glass sunroof

This is valid only if you are not using your vehicle for a longer time.



Low-voltage switch-off

If the battery voltage drops below 10.5 Volts, the possibly operating consumers supplemental heater and cooler switch off. The supplemental heater and the cooler also cannot be switched on with a battery voltage of less than 10.5 Volts.

Charging the additional battery

The additional battery is charged in the following way:

- Make a 230-Volt connection see page 58.
- Switch on the fault current breaker see page 56, or
 While driving, all batteries (starter and additional battery) are charged from the generator of the motor.

As well as the above, the additional battery must be charged as follows:

- At regular intervals through the 230-Volt connection.
- After a long period without use of the battery (e.g. with seasonal use) before beginning a journey.
- 4 weeks at the latest after the last charge with the built-in battery charger for at least 48 hours.

Additional battery replacing

Warning! Only a gel battery (battery with bound electrolyte) of the same type can be used as a replacement additional battery.

When charging a conventional battery with a liquid electrolyte gases can be given off and give rise to fumes.
For safety reasons, batteries with liquid electrolytes cannot be used. The battery compartment is not suitable for batteries with liquid electrolytes.

 Before disconnecting the additional battery, all devices and lights should be switched off or their fuses taken out.

Note for right-hand drive "Big Nugget"

In the right-hand drive Big Nugget there are two additional batteries installed. The treatment of the additional batteries is as previously described.

One additional battery is located as described at the bottom of the kitchen block – see page 59.

The other additional battery is installed in the base at the bottom of the left front seat.

Water supply

Warning! Only fill the fresh water tank from supplies that are clearly designated as being of drinking water quality.

- Only use tubes or containers permitted for drinking water to fill the fresh water tanks.

 Rinse the filling hose or container thoroughly before use with drinking water (2 to 3 times their capacity).

- Empty the filling hose or containers completely after use and lock the openings of the filling hose or container.

The following devices are supplied with water from the fresh water tank:

- the tap beside the sink.
- the tap (hand tap) in the sanitary area.
- the toilet flush.

Fill opening for fresh water

The lockable fresh water fill opening is located at the back left in the vehicle wall.

To open

- Turn the key in the tank lid by 180° to the left.
- Squeeze in the tank lid (1), turn it to the left and take it off.

Before filling you need to make sure that the drainage valve of the fresh water tank is closed – see page 63.

To close

- Put on the tank lid (1) and turn to the right.
- Turn the key in the tank lid by 180° to the right.

The tank lid ought to be locked at all times to be safe so that others cannot pour something undesireable into the tank. - Still water in the fresh water tank or water pipes becomes stale after a short time. Therefore you should thoroughly clean the water pipes and the fresh water tank before each use of the vehicle. After every use of the vehicle, empty the fresh water tank and the water pipes completely.

- If not in use for more than a week, disinfect the water system before using the vehicle.

- As a precaution, carry sterilisation agents (available in specialist camping shops and pharmacies) when travelling abroad.



Fresh water tank

The fresh water tank is located at the bottom of the kitchen block underneath the bench. It is covered by a shelf (1) that is underneath the padding (2).

The tank is equipped with an electric water pump. It is switched on by opening the water tap.

The fresh water level is measured by a sensor fitted in the tank and displayed on the command centre.

The cleaning opening on the top of the tank can be reached as follows:

- Unfasten the safety belt and slide the bench forward.
- Remove the padding (2) and take out the shelf (1).
- Unscrew the cover (3) of the cleaning opening to the left.





Emptying the fresh water system

Warning! The outflow of the fresh water is located beneath the floor of the vehicle. During frosts the discharged water turns to ice and causes a potential danger of injury from slipping!

- Therefore only discharge the fresh water in a place where the build-up of ice will pose no danger to either yourself or other persons.

So that the water does not become putrid, the fresh water system should be emptied if the water supply will not be used for several weeks.

The system should of course also be emptied if the vehicle is not being heated during a frost – see also page 77.

The drain valve of the fresh water system is located at the bottom right of the kitchen unit underneath the cooler.

After removing the board (1) the following drain valves are visible:

- 2 safety / drain valve of the warm water boiler
- 3 Cold water drain valve
- 4 Fresh water drain valve

To empty the fresh water tank, press the handle of the drain valve (4). The figure shows the handle in the closed position.



Emptying the warm water boiler

- Take out the fuse (water pump) see page 86, to cut off power to the water pump.
- Open the safety valve (2) by raising the valve handle (arrow).
- Open the water tap and place in the middle position.

The hose pipe between the fresh water tank and the tap can be emptied by following the above procedure and then:

- opening the drain valve (3) for cold water
- activating the flush for the toilet,
- pulling the shower tap all the way up and hanging it into the holder provided.

This allows the water to flow through the floor drain.

After emptying all the drain valves should be closed again, so that fresh water does not unintentionally flow through the system when you next fill up.

Note:

- If after emptying the fresh water system the unit will not be used again for a long period, the cover of the cleaning opening should be unscrewed for a couple of days, so that the remaining moisture in the tank can evaporate.
- The fuse for the water pump should also remain out. This will avoid the water pump being accidentally turned on. The water pump does not run dry and suffer any damage.



Waste water disposal

The waste water from the kitchen sink, the wash hand and shower basin in the sanitary area is collected in a waste water tank. The waste water tank is fitted underneath the vehicle on the left-hand side. Before allowing waste water to drain into the tank, ensure that the drain valve (see page 66) is properly closed.

Environmental tip:

- The tank should be drained in time so that the waste water does not flow off uncontrolled though the overflow. There is an indicator on the command centre showing when the waste water tank is full – see page 17.
- At many campsites or in many communal facilities the tank can be emptied directly.

The sites and places in Germany with the necessary facilities can be found in the documents for motorcaravanners.

You can get information on this from the German Caravan Industry Association (CIVD).

You will also find more information in camping guides.

If such facilities are not available, the waste water should be collected in suitable receptacles and then drained into the public waste water system (not the rain water system).

Emptying the waste water tank

The drain valve is located on the left-hand side of the vehicle underneath the vehicle.

Note: To avoid soiling hands and clothes, put on a pair of work gloves before emptying the waste water tank.

- Pull out the handle (2) evenly. The valve opens and the waste water flows out of the waste water tank.
- After emptying, push the handle (2) all the way back in. The valve is closed.

Warning! To avoid damage to the waste water tank, the outflow pipe (1) can be rotated. You can increase the clearance by turning the outflow pipe (1) 90° to the side. Therefore remember always to turn the outflow pipe to the side before beginning your journey.

For a controlled disposal of waste water, we recommend putting a bowl under the outflow pipe (1) or connecting a suitable hose. The outflow pipe (1) must be pointing downwards.

After emptying, the drain valve must be closed again.

Note: If the vehicle is not used during the winter, the water system should be completed emptied.

Cleaning opening

The cleaning opening of the is located on the underside of the waste water tank.



Cleaning the water tanks

Warning! Commercially-available cleaning agents (all-purpose cleaners) should never be used to clean the fresh water tank!

- Only use sterilisation agents available from specialist camping shops or pharmacies for cleaning. Follow the instructions of the manufacturer.

If the water in the fresh water tank has become putrid and the water in the waste water tank has not been emptied in good time, this can lead to odour problems.

The water tanks should be cleaned in the following way:

- Empty the water tanks.
- Fill with sterilisation agent from a specialist camping shop or pharmacy. The guidelines on mixing on the sterilisation agent packet should be followed.
- Fill both tanks with fresh water and allow the mixtures to work for a little while.
- Drain the mixtures and rinse the water tanks and pipes with fresh water.

Warm water boiler

The warm water boiler is located at the bottom of the wardrobe and is heated by gas. The boiler has a capacity of approx. 10 litres of water. Heating the water to a maximum temperature of 70 °C, when mixed with cold water, gives a sufficient amount to shower at a temperature of approx. 40 °C. The ignition, operation and water temperature are monitored and controlled electronically.

The system is operated by the control panel located in the side panel of the wardrobe – see page 44.

Covering cap for the flue

A cover is provided for the flue opening (1) of the warm water boiler (on the right back side of the vehicle), which should be attached to the opening in the following situations:

- before washing the vehicle and
- if the warm water is not in use for an extended period.

Before using the warm water boiler the cover must always be removed.

Using the boiler while travelling

You can leave the boiler on while travelling, e.g. in winter of if you wish to freshen up directly during the journey.

Warning! The use of warm water boilers is prohibited in petrol stations due to the open flame, which leads to an increased risk of fire and explosion.

- Ensure that the gas cooker, warm water boiler and supplemental heater are turned off when refuelling.



Gas bottle unit

The gas cooker and warm water boiler are supplied from the gas unit. The gas bottles to be used are not supplied with the vehicle.

Gas bottle compartment

In the gas bottle compartment (below in the wardrobe) you can secure a maximum of two gas bottles (5 kg). However only one gas bottle can be connected at a time. The connected gas bottle must be fitted with a safety valve and a pressure controller, which reduces the operating pressure to **30 mbar**.

The gas bottle compartment can be reached by opening the right rear door.

The door of the gas bottle compartment can be opened or closed as follows.

Opening the door

- Release the lock by positioning the handle
 (1) vertically Figure A.
- Turn the handle (1) 90° to the left or right
 Figure B.

Closing the door

- Turn the handle (1) 90° to the left or right until the lock clip shuts. At the same time push onto the door a little.
- Then pull the lever back again (1) so that the lock is secured.



Changing the gas bottle

- Open the gas bottle compartment
- Close the gas shutoff valve
- Close the main shutoff valve (1) of the gas bottle.
- Loosen the union nut (2) by turning it to the right.
- Loosen the safety belt (4) and raise the belt unit above the main shutoff valve (1).
- Take out the gas bottle, screw the lock nut on the connecting thread of the bottle valve and pull the protective flap of the gas bottle over the bottle valve.

The gas bottle holders are suitable for 5 kg gas bottles.

If there are two bottles stored in the gas bottle compartment, the front bottle should be taken out of the compartment before the back one.

The gas bottles are replaced by following the steps in reverse order.

Ensure that the screw (2) of the safety valve is tight and that the gas bottle compartment is securely locked.



- 1 Bottle safety valve with Main shutoff valve
- 2 Union nut Left-hand thread!
- 3 Pressure regulator (**30 mbar**)
- 4 Safety belt

Gas shutoff valve

The shutoff valve is located in the wardrobe opposite the door of the sanitary area.

- 5 Shutoff valve for the warm water boiler
- 6 Shutoff valve for the gas cooker

All shutoff valves are shown in the open position.


Warning! The following instructions must be obeyed in the interests of your own safety:

- Work on the gas unit should only be carried out by qualified professionals.

- The gas unit must never be connected to municipal or gas grid networks.

- You may not make any modifications to the gas unit.

- For safety reasons, a tightness and function test of the unit must be carried out by a technical expert every 2 years and each time the gas unit screws are opened. It is the vehicle owner's responsibility to have these checks carried out.

- Close all gas shutoff valves before every journey and before an extended period without use.

- The gas hose between the pressure regulator and the gas system should be checked on a regular basis. It should be replaced immediately if there is an actual leak or if you suspect one.

You should ensure that the new hose corresponds to the norm printed on the old hose.

- The floor ventilation in the gas bottle compartment must not be closed (e.g. by slush or cleaning cloths), so that in case of a leak the gas can escape.

Check the floor ventilation at regular intervals!

- The gas bottle compartment must be tightly and securely closed off from the vehicle interior.

Note: For commercially operated vehicle the gas system needs to be inspected according to the regulations of the trade association.

Operating instructions

Supplemental heater

The fuel supplemental heater functions independently of the vehicle engine, but is still supplied by the same fuel tank. You can use the heating while the vehicle is moving or at rest.

If the fuel tank is running low, the heating will not start or it turns off. This mechanism ensures that the heating does not use up all the fuel, and the vehicle can still be started.

The heater is equipped with an undervoltage safety device. This means that the heaters will not switch on at a voltage of less than 11 Volts, but will instead turn off. In such a case we recommend starting the vehicle motor and restarting the heating while the engine is running. The power supply is from the additional battery. You should recharge the additional battery as soon as possible to ensure sufficient battery voltage.

You can set up to three different start times with the integrated timer.

On cross-country journeys through mud or deep snow the gas flue pipe can clog up the heating. Therefore before turning on the heating in such conditions, the flue should be checked to ensure that it has a clear passage.

Operation at high altitude

- The heating can be used without limit up to 1500m and for short periods about 1500 m (e.g. when crossing a pass or taking a break).
- For longer periods above 1500 m (e.g. winter camping) the fuel supply must be adjusted to the high altitude.
 Information on this is available from Bosch Service or Eberspächer Service.

In accordance with official regulations, the following must be observed:

The heat exchanger of the heating device has a service life of 10 years. After this period has expired the heat exchanger must be replaced by an original heat exchanger.

For the purposes of monitoring this period, the year of first use is entered on the manufacturer's nameplate on the heating unit (underneath the vehicle floor).

After the heat exchanger is replaced, a plate with the date when the work was performed will be attached to the heat exchanger.

The vehicle owner is responsible for initiating the inspection and the exchange.

Vehicle care - interior

Fabric upholstery

The fabric upholstery can be treated with dry foam and a brush.

Curtains

The curtains can only be dry-cleaned. If they are washed they could shrink, and the fire resisting components will be washed out.

Furniture

All visible furniture parts are plastic-coated. They can be treated and cleaned with conventional agents.

Bench/bed

The seat fittings and the locking lever mechanisms need to be cleaned from time to time.

The guide rails of the bench/bed should be cleaned regularly and treated with a fine coat of a non-oily slip agent (silicon spray).

Cooler

To avoid the formation of ice layers the cooler should be thawed regularly. Switch off the cooler (see page 17) and open the cooler flap.

No not use additional heat sources to speed up the thawing as this could cause damage. The condensate needs to be removed before switching the cooler on again.

The cooler can be cleaned with water to which a little vinegar has been added. To avoid mould and mildew when the cooler is not in use for a longer period, the flap should be kept open a little with a folded towel.

Gas cooker and sink

The surfaces of the cooker and sink are made of stainless steel.

- Clean the surfaces with a commercially available, non-abrasive cleaning agent. Remove the cooking grills while you do so.
- The burner tops do not need to be removed for normal cleaning of the cooker, only for repair work.
- The burner tops have a slot at the bottom to draw in combustion air. Water and detergent should not be permitted to enter the burner.
- While cleaning the gas cooker, take care that the thermal element of the gas burners is not damaged or bent.
- Clean the gas burners at regular intervals with a brush.

Central electronics display

Anti-static cloths or anti-static agents should be used to clean the display to prevent a build-up of static that can lead to the display becoming garbled.

Sanitary area

The plastic parts should only be cleaned with soap or a very mild detergent. So as not to destroy the shiny surface of the plastic parts, never use scourers or solvents, e.g. nail varnish remover.

Toilet

All plastic parts of the toilet should be cleaned and cared for with commercially available cleaning agents (non-abrasive). Further information on cleaning and care of the toilet can be found in a separate brochure of the toilet manufacturer provided with the vehicle.

Warm water boiler

- To descale the boiler use vinegar, which can reach the boiler through the fresh water tank - see page 45.
- Allow some time for it to work, then empty the boiler - see page 64.

Then thoroughly rinse the warm water boiler with fresh water.

Adjustable windows

- Clean the adjustable windows with plenty of water and a little washing-up liquid. Then rub the windows dry with a leather cloth.
- Light scratches can be polished out with a special acrylic glass polish or with brass polish.
- Ice scrapers or deicing spray must not be used on the adjustable windows.
- Rub the rubber seals occasionally with a rubber cleaning agent. The rubber seals will stay flexible and last longer. They will also not freeze in winter.

Vehicle care - exterior

Supplemental heater

The casing of the supplemental heater is provided with a factory-made surface protector. However as damage to this protective layer during use of the vehicle cannot be ruled out, we recommend checking the casing in certain circumstances and supplementing it if necessary.

To supplement it, you can use the corrosion protection agents for the vehicle undercarriage.

Outside of hot periods (summer) you should turn on the supplemental heater once a month for approx. 10 Minutes.

Decorative stripes and writing

The decorative stripes and writing on the outside of the vehicle must not be cleaned with a high-pressure cleaner or tar remover so that they do not rub off or become damaged.

Skylight/ electric glass sunroof*

- Regularly remove dirt (insects, leaves etc.) from the seal frame and clean the rubber seal.
- Then treat the rubber seal with a rubber conditioner. The seal will stay flexible and last longer.
 It will also not freeze in winter.
- Clean the glass dome with acrylic glass cleaner. Opaque areas and light scratches on the acrylic glass pane can be treated with acrylic glass polish.
- The roller blinds should be cleaned with mild soap.

Warm water boiler

So that no water ends up in the combustion unit of the warm water boiler, make sure to put the cover (flue cap) on the side gas flue before washing the vehicle.

Waste water tank

Regularly check the drain valve for free movement.

Clean the mechanics and lubricate or oil the guides between moveable parts.

Waxing

A good wax protects the vehicle paintwork from environmental influences (e.g. parking under tree, insects, bird droppings etc.) and also from light mechanical impacts.

At the latest, when water no longer clearly rolls off the clean paintwork, you must rewax the vehicle with a wax that contains a UV filter.

Even if you regularly use a wash-wax, you must treat the paintwork at least twice a year (more if possible) after washing with a hard wax containing UV stabilising material.

Winter use

Your recreational vehicle can be used shortterm in the winter in certain circumstances:

- The fresh water system continues working in frosts of up to -10° C as long as the vehicle is constantly heated (to living temperature) and the warm water boiler is turned on.

To avoid the water supply freezing, the waste water can also be treated with a sufficient amount of salt.
 As an alternative we recommend leaving the discharge valve of the waste water tank open and catching the waste water in a suitable container.

 If the vehicle is not being used or used for a short time only, the fresh and waste water systems must be emptied if there is a danger of frost.

Warning! Portable devices that produce heat and heating devices not sealed into the room may not be used in the vehicle. Additional equipment for winter operation:

- Snow shovel
- Defrosting agents
- Antifreezing compound
- Snow chains
- Starter cables

We recommend the following when camping in cold weather:

- Release the hand brake so that it does not freeze tight. It is better to put the vehicle in gear or place wedges under the tyres.
- Do not place lines on the ground as they may freeze tight.
- Keep the area underneath the camper as free as possible so that the supplemental heater gets sufficient oxygen and exhausts may escape. Therefore do not build up a dam of snow directly around the vehicle.
- If necessary clear the vehicle roof of snow in the area of the skylight and roof window.

Ventilation

In winter it is particularly important to ventilate the vehicle. The high level of air humidity caused by breathing, cooking steam, snow brought in and damp clothing has to be able to escape.

Therefore always keep the skylight and the roof window free.

To reduce the humidity in the vehicle we recommend the use of commerciallyavailable room dehumidifiers.

Supplemental heater

After you have filled your vehicle with antifreeze, we recommend starting the heating before your journey, so that any untreated diesel still in the heating system is used up.

Operating instructions

Procedure during storms

Warning! If the centre of the storm is above your vehicle parking place, we recommend:

- disconnect the 230-Volt mains from the supply plug.
- Await the end of the storm, for your own safety, in the vehicle.

Child safety (sliding door)

The door lock of the sliding door is fitted with a child safety device.

Warning! Ensure that the child lock on the door is not on when there are children in the vehicle and the vehicle is parked away from the public highway (camp site). In case of any danger (fire, injury, etc.) the children cannot otherwise open the door.

This also ensures that in any possible emergency all passengers can leave the vehicle quickly.

To activate the child safety device – see Ford operating instruction "Transit".

Procedure in case of fire

- Ensure that all passengers leave the vehicle.
- If the situation allows it, close the main shutoff valve of the gas bottle
 see page 70.
- Disconnect the 230-Volt mains supply - see page 58.
- Raise the alarm and call the fire brigade.
- Fight the fire if this is possible without risk.

Safety precautions

Keep at the main entrance door at least one approved or ISO 7165-conforming 1kg dry powder fire extinguisher, and keep a fire blanket beside the cooker, if a fire extinguisher and fire blanket are not available from the factory.

Familiarise yourself with the instructions on your fire extinguisher as well as the fire safety precautions made on your camping site.

Accessories and spare parts

If you want to equip your camper with special accessories, for example, bicycle, ski or surf board racks, please use the accessories offered by Westfalia. These accessories can be obtained from your Ford contract partner, or from Westfalia Van Conversion. The assembly will be made their professionally as well of course.

These accessories are developed especially for your recreational vehicle and will guarantee safety, reliability and suitability – please also follow the instructions on vehicle safety in the operating instructions "Transit".

In your own interest we recommend using only original Westfalia parts or spare parts for you vehicle according to specifications of the respective equipment manufacturer.

Driving instructions

Driving safely

When driving a recreational vehicle a few particular things must be noted:

- Close the adjustable windows, skylight and roof windows.
- Before driving check that all doors, flaps and drawers are closed tight.
- Fold back the dining table and store it securely in the holder provided in the rear area.
- All seats must face the direction of travel when travelling and be securely fastened.
- The seatbelt on the bench must be lying on the bench so that any possible passengers can fasten themselves in.
- All luggage and items must be safely stowed.
- When the vehicle is loaded the driving characteristics are altered. Especially if the roof-rack is being used. You must therefore adjust your driving to these altered conditions.
- Your speed should be suited to the traffic, the condition of the roads and the load.

- Close all gas shutoff valves.
 Exception: If you wish to leave the warm water boiler on when travelling.
- The supplemental heater must be switched off when refuelling. Avoid open flames, the gas cooker and warm water boiler must be switched off.
- The use of gas equipment at petrol stations and on ferries is not allowed.
- If you have a gas bottle in your vehicle you are generally not allowed to park your vehicle in an underground or overground car park.
 Observe the garage or car park regulations.
- If bicycles* and/or sporting equipment* are attached, the fastening elements of the carrier unit and sporting equipment must be regularly checked to ensure they are secure and adjusted if necessary.
- Check if the awning* has been wound in completely and is securely latched into place.

Travel tips

Preparing for a trip

One great advantage of your camper is that you can decide on your travelling time and destination on short notice and also change your plans again spontaneously.

The following list should help you prepare for the trip and allow you to quickly check that you have all important items before you leave.

Before starting the trip

- Plan the travel route and make use of suggestion provided by automobile clubs and tourist boards of the destination areas.
- Know the vaccination regulations of the countries you are visiting.
- Redirect or cancel mail and subscriptions.
- Leave behind any possible holiday address or telephone number.

Documents

- Personal ID / Passport (valid?)
- Driver's license
- Vehicle guide (operating manual, list of service centres, etc.)
- Vehicle registration papers
- Green insurance card
- International travel insurance
- Vaccination certificates
- Papers for any pets travelling along
- Maps
- Camping guides
- Travel guides

Vehicle

- Check operational readiness (oil level, tyre pressure, lighting, etc.), if necessary have an inspection done.
- Check/supplement the gas supply, change gas bottles if necessary.
- Fill up fresh water.
- Empty waste water tank.
- Check your breakdown equipment (tool kit, spare wheel, tow bar, jump cables, fuses, torch).
- Take on board power supply cable and cable drum if you want a power connection on the way.

Driving instructions

Household and camping equipment

We recommend making a list of all the items you will need for your trip such as household goods, camping gear, and recreational equipment.

It is annoying when you realise that you have forgotten toiletries, deck chairs or surfing gear at your holiday destination.

Overnight tips for trips in Germany

You should start looking for a camping site during the day to avoid any unexpected problems.

Observe the overnight stay regulations.

In Germany you generally may overnight once where parking is permitted. There might be trouble though if you overnight twice in one place. Under no circumstances the impression should be made on public parking lots that you are camping, that is hanging up wash, setting up deck chairs and so forth.

In Germany there is now a large number of "camper-friendly" locations that allow overnight stays and have service facilities for fresh and waste water without you having to use a campsite.

Information is available from the CIVD (Caravaning Industrie Verband Deutschland).

International travels

Inform yourself about any special requirements for campers in transit and destination countries before leaving home, for example:

- necessary papers
- country ID (in the required size) on the rear of the vehicle
- power adapter cable if you want a power connection on the way
- speed limits
- overnight sites

In the interest of all camper users, please observe the regulations of the host country strictly.

Many prohibitions and limitations in the last few years are reactions of the "affected" community and country to the unreasonable behaviour of "wild" campers.

And one more tip for staying in countries where "wild" camping is tolerated or even allowed:

 as a precaution, park the car in direction you will be moving off in – you are then ready to start much more quickly if danger threatens.

On the next page you will find a list of possible places to stay in European countries outside of camping sites, compiled in co-operation with the ADAC.

Driving instructions

Country	on streets inside of highwaysof in park and Rest stops		-	Notes		
	allowed	not allowed	allowed	not allowed		
Belgium	•		•		If not limited by local regulations, max 24 hours.	
Germany	•		•		One overnight only. The police can order time limits.	
Denmark		•		•	Only short stays allowed.	
Finland		•		•	Only short stays allowed.	
France		•		•		
Greece	•		•		Not allowed on archaeol ogical sites or on beaches, forests and public places.	
Great Britain	•		•			
Italy	•		•		If not limited by local regulations, one overnight stay only.	
Luxembourg		•		•		
Holland		•		•		
Norway		•		•	For parking and rest stops you should seek permis- sion from the police.	
Austria	•		•		Regional limitations are possible.	
Sweden	•		•		Can be limited by time.	
Switzerland	•		•		Varies in each canton. It is advisable to ask the police or canton authorities.	
Spain		•	•			

Places to stay in Europe outside of official camp sites.

No guarantees for this information.

Where to take your camper in towns

Of course you can drive to a campsite with the camper, but then many miss the thrill of this special vehicle.

Some would like most of all to spend the night right on a market square; this is allowed is some countries.

Here are a few tips for those that want to stay in town with their camper:

- Many cities have fair grounds where sanitation facilities can often be found.
- Another place for overnighting in cities is provided by sport stadiums. You will surely find a lot of parking space there and in most cases even with park-like facilities.
- In cities you have the ideal starting location for visiting museums, theatres or for example to take a gourmet stroll. Anyone wanting to stay in a town and prepared to put up with a little street noise is best off in a guarded parking lot.
- Restaurants in the suburbs often have large parking lots. In most cases all you need to do is dine in the restaurant – and already you can get permission to stay on the parking lot overnight.

Self-help

Tool kit

Information on the position of the tool kit (car jack) can be found in the "Transit" operating manual.

Note: The first aid kit and the warning triangle do not belong to the vehicle's scope of delivery.

Fuses

All electrical consumers in the living area are protected with appropriate fuses. Before you can change the fuses or check the fault current breaker, you must slide the bench forward.

The fault current breaker and the fuse box are located behind a lockable flap in the side panel.

Opening the flap

 Unlock the locking mechanism by turning the lever (1) upright – view A.

Closing the flap

 Swivel flap up, press slightly and turn lever (1) back again.



Fuse B

Fault current breaker for 230-Volt consumers

The function of the fault current breaker is described on page 56.

Warning! Only insert fuses of the prescribed strength. – Replace fuses only if the cause of the fault has been corrected.

Fuse carrier C

This fuse carrier contains fuses for the following devices:

1 – Central electronics and
Water sensors 5 A
2 – Water pump, 12 V socket 15 A
3 – Interior lights, toilet and
warm water boiler 15 A
4 – Spot lights and
light in the sanitary area 15 A
5 – Supplemental heater 25 A
6 – Cooler, light on the glass sunroof
Step*, electric glass sunroof* 15 A

The allocation of the slots corresponds to the number on the transparent cover flap of the fuse carrier (C).

There is a notch on the fuse box. Fuse 6 is always located beside this. This notch serves as a fixed point for the cover flap.

In addition the toilet flush is fused with a 3A flat fuse. This fuse (arrow) can be reached after pulling out the black waste tank – see page 53.





Self-help

Fuse battery box

Two 100A fuses are located in the battery box (motor generator/ relay additional battery) One fuse is located beside the additional

battery and one beside the starter battery.

Only on right-hand drive "Big Nugget"

Three 100A fuses are located in the battery box (motor generator/ relay additional batteries).

These fuses can be found:

- Beside the additional battery at the bottom of the kitchen block,
- beside the additional battery at the base of the left front seat,
- and beside the starter battery.

Note: We recommend that these fuses are checked only by expert professionals.

Warning! Before opening a fuse box the terminal clamps must be separated from the positive pole of the starter and additional battery.

These fuses can be found as follows:

Fuse beside the additional battery at the bottom of the kitchen block

- Slide the bench forward, remove cushion
 (2) and board (1).
 The additional battery is installed to the right beside the fresh water tank.
- The fuse is located between the separating wall of the kitchen cupboard and the additional battery.



Fuse beside the starter battery

The following fuses are located in the battery boxes in the box below the driver's seat.

Battery boxes:

- Starter battery charger 20A
- Additional battery cut-off relay 100A

These fuses can be found as follows:

- Slide the driver's seat all the way forward.
- Remove the seat box cover.
- The fuse box is located directly between the battery and the seat box case.

Changing light bulbs

Fluorescent lights

- Unscrew the plastic screw (1) in the diffuser panel with a screwdriver and remove the diffuser panel
- Loose four screws (arrow) a little and carefully pull out the fluorescent bar to the left.
- Insert new fluorescent bar and gently screw in the four screws again.
- Insert the diffuser panel and secure with the plastic screws.

Fluorescent light* above the right window

- Carefully lever out the diffuser panel with a screwdriver. It is only clamped in.
- Loosen four screws a little and carefully pull out the fluorescent bar.
- Insert new fluorescent bar and gently screw in the four screws again.
- Insert the diffuser panel and press down at the same time.

Reading light above dining table

- Carefully lever out the light (arrow) with a screwdriver.
- Change the faulty light bulbs.
- Then press the light back into the recess in the panel.

Light below in the left side wall panelling

- Carefully lever out the light with a screwdriver.
- Change the faulty light bulbs.
- Then press the light back into the recess in the panel.





Self-help

Halogen spotlight

- Carefully lever out the inner holder (arrow) with a screwdriver. Be careful that the glass panel of the light does not fall out.
- Pull out the light bulb.

The new light is inserted by following the steps in reverse order.

Light in the mechanical glass roof*

- Lever out the facing (1), behind which the defective bulb is to be found.
- Pull out the fluorescent bar from the brackets and pull out the plug.

The new fluorescent bar is inserted by following the steps in reverse order.





Malfunction table

Malfunction	Solution		
Supplemental heater not working a - Does not start up, no fan noise	 1 - Check the charge of the additional battery - see page 17, if necessary Charge the battery from the 230-Volt mains supply (see page 58) or from the running of the engine. 2 - Check fuses – see page 87. 		
	3 - Set the timer correctly.		
b - The following error message appears in the central electronics display:			
-F11 – Undervoltage	 1 - Check the charge of the additional battery - see page 17, if necessary Charge the battery from the 230-Volt mains supply (see page 58) or from the running of the engine. 		
-F12, -F13 – Overheating	2 - Turn off the heat, open the air extractor or uncover the warm air vent (see page 19) and turn the heating on again.		
-F23 – Glow plug activation interrupted	3 - Check fuse 5 – see page 87.		
-F52; -F53; -F54; -F55 or -F56 - lack of fuel	 4 - Turn off the heating and wait until the heating fan stops running. Then turn on the heating again. However do not repeat this procedure more than twice. If the heating still does not switch on, check the fuel supply. 		
For all other error codes	5 - Make a note of the error code turn off the heating and contact Bosch Service or Eberspächer Service.		

Malfunction	Solution		
Cooler does not work	 1 - Check the charge of the additional battery - see page 17, if necessary Charge the battery from the 230-Volt mains supply (see page 58) or from the running of the engine. (You must not turn on the cooler again). If the battery voltage reaches 13 Volts, the cooler will start automatically. 2 - Check the fuse – see page 87. 		
Charger won't charge	 Check at the fault current breaker if the 230-Volt connection has been properly established – see page 56. 		
No charge current - display in the central electronics does not display a change in the voltage display.	1 - Check the fuses in the battery box– see page 88		
Water pump not pumping water	 Check the charge of the additional battery - see page 17, if necessary Charge the battery from the 230-Volt mains supply (see page 58) or from the running of the engine. Check the fuses – see page 87. 		
	3 - In winter check whether the fresh water unit has frozen.		
Warm water boiler not heating	1 - Check the gas supply and the gas shutoff valve.		
	2 - Take off the cover for the flue opening (right rear of vehicle)- see page 68.		
	3 - Check the fuses – see page 87.		

Information for self-help You can solve some possible problems yourself with the help of the malfunction table.

If the individual corrective measures are not successful, leave malfunctions that you cannot solve yourself to be remedied by qualified experts.

Technical specifications

Weights

2	Van FT 350 L 2.2 l TDCI (103 kw/ 140HP)					
Vehicle specifications	ecifications High roof BN BN XL			High roof BN BN XL		
Permitted total weigh1) in kg	3500	3500	3500	3500		
Curb weight ²⁾ approx. in kg	2800	2850	2800	2850		
Load capacity approx. in kg 700		650	700	650		

¹⁾ Technically permissible total weigh when loaded.

²⁾ Weight when ready to drive (basic equipment depending on model,

full fuel tank and 75 kg for the driver).

Note: The curb weight can vary depending on the model version or supplemental equipment so that the payload (cargo) is reduced accordingly.

The payload includes the following positions:

- Value for passengers
- Basic equipment (gas, water, electrical devices)
- Additional equipment
- Personal gear

Following are some weight specifications of standard single components or additional equipment that may be used optionally.

Bench seat	. 64 kg
Double bed* approx.	30 kg
Awning* 3m approx	. 18 kg
Bicycle carrier* approx.	. 10 kg
Sporting equipment holder*	
(Translift) approx	7.5 kg
Fire extinguisher approx	2 kg

Dimensions

Measurements in mm	High roof	High roof XL
Vehicle length approx.	5680	5680
Vehicle width (excluding wing mirrors) approx.	1974	1974
Vehicle height approx.	2650	2850
Headroom approx.	1915	2115
Headroom (in kitchen area)	1915	2115
Internal height above roof bed* approx.	500	700
Internal height (between sleep- ing surface below and the under- side of the roof bed*) approx.	850	850
Sleeping surface below approx.	2000 x 1300	2000 x 1300
Top sleeping surface approx.	2000 x 1370	2000 x 1330

The figures refer to the respecive base model. Figures can vary due to additional accessories, e.g. sporting equipment holder, luggage carrier, bicycle carrier etc.

Technical specifications

Seats

Front seat	2
Bench	3

Sleeping space

Bench	2
Double bed* in high roof	2

Nameplate (manufacturer's nameplate)

The nameplate of the recreational vehicle is located on the column to the left beside the entrance to the sliding door.

Right-hand drive vehicles have the nameplate on the column to the right beside the entrance to the sliding door.

The following entries are on the nameplate:

- 1 vehicle ID number
- 2 equipment option number

This information is required when ordering spare parts and for technical inquiries regarding the scope of equipment of the camper equipment options.



Living area

Supplemental heater

Fuel consumption

– Petrol	Max. approx. 0.34 l/h
– Diesel	Max. approx. 0.44 l/h
Mains voltage	12 Volt
Power consumption .	max. 40 Watt
in start phase	< 100 Watt
during regulation	
interruption "off".	4 - 5 Watt
Heat current	max. 3500 Watt
	high 3000 Watt
	medium 2000 Watt
	low 1000 Watt

Liquid gas system

Maximum of two propane gas bottles with pressure controller (30mbar) and safety bottle valve.

The gas bottles are not supplied with the vehicle.

Gas cooker

Gas consumption each burner max approx. 125 g/h

Warm water boiler

Gas consumption max. 120 g/h

Technical specifications

Electrical system

12-Volt mains

Additional battery (maintenance-free gel battery) 140 Ah

Additional batteries* (right-hand drive models) (maintenance-free gel battery) ... 2 x 80 Ah

Power consumption

Cooler max.	42	Watt
Supplemental heater	20	Watt
Water pump	18	Watt

Warm water boiler

- Control electronics max. 1 Watt

Interior lighting

_	Fluorescent lights	11	Watt

Reading lights

_	Spot	10	Watts	each
_	Lamp (soffit)		15	Watt

230-Volt circuit

Frequency 50 Hz Fault current breaker:

- protect the electrical network 1	3 Amp
- protect passengers	10 mA

Charger

Charging current for	
additional battery max. 1	2 A
Charging current for	
starter battery max.	2 A

Water supply

Fresh water tank with electrical water pump and fresh water level sensor. Drain valve in the bottom kitchen cupboard.

Waste water disposal

Waste water tank with water level sensor. Drain valve under the vehicle in front of the waste water tank.

Warm water boiler

Contents	approx	10 litres
Water temperature	m	ax. 70 °C

Toilet

Black waste tank 17 litres Electric toilet flush

Cooler

Electric	
Power supply	12-Volt
Adjustable temperature	

Cooler capacity 40 litres

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