

EN

# Globevan

Instruction manual  
and service logbook



X1513\_08.395

***Dethleffs***  
A friend of the family



## **Congratulations**

Congratulations on your new Dethleffs Globevan. And on behalf of all our colleagues, we would like to thank you for your choice.

With Dethleffs Globevan you now have a compact and versatile vehicle that will give you great flexibility every day and in your leisure time. It opens up a wide range of uses for you: Whether as a comfortable shuttle for about town, as a transporter for shopping and moving home, or as a fully-equipped camper for nature and leisure experiences – your Dethleffs Globevan will meet all your needs.

This instruction manual mainly contains information about your Dethleffs Globevan's living configuration. It contains all the important information and tips that will enable you to take full advantage of all the technical advantages of your Dethleffs Globevan. You will also find important information about care, to help you maintain the value of your Dethleffs Globevan.

You will receive all documents for the basic vehicle and the various input devices separately.

If you still need support or would like to have maintenance work carried out, simply contact your nearest Dethleffs trading partner directly. He will make your Dethleffs Globevan ready again for the next adventure.

Now we'd like to wish you many unforgettable times with your Dethleffs Globevan.

<b>Vehicle data</b>	<b>Customer address</b>
Model:	Surname, Christian name:
Car manufacturer/type of engine:	Street, no.:
Initial registration:	E-mail:
Chassis number:	
Serial number:	Postal code, town:
Purchased from company:	
Key number:	
Dealer's stamp and signature	

We reserve the right to alter the construction, equipment and the scope of delivery.  
Special equipment is also listed that is not included in the standard scope of delivery. The descriptions and illustrations in this brochure do not relate to a particular version. For all details, only the respective equipment list is valid.

# Table of Contents

1	Guarantee .....	9
1.1	Conditions for leakproof guarantee .....	9
1.2	Water ingress test .....	10
1.3	Further inspections .....	13
2	Introduction .....	16
2.1	General .....	17
2.2	Environmental tips .....	17
3	Safety .....	18
3.1	Fire prevention .....	18
3.2	General .....	19
3.3	Road safety .....	20
3.4	Towing .....	20
3.5	Gas system .....	21
3.6	Electrical system .....	22
4	Before the journey .....	23
4.1	Payload .....	23
4.2	Road safety .....	26
5	During the journey .....	29
5.1	Driving with the Dethleffs Globevan .....	29
5.2	Driving speed .....	29
5.3	Seat belts .....	29
5.4	Driver's seat and front passenger's seat .....	30

5.5	Seating arrangement.....	31
5.6	Operating the heater and cooker .....	31
<b>6</b>	<b>Dethleffs Globevan setting up.....</b>	<b>32</b>
6.1	Handbrake .....	32
6.2	230 V connection.....	32
6.3	Icebox (special equipment).....	32
<b>7</b>	<b>Overview of fittings and electrical components.....</b>	<b>33</b>
<b>8</b>	<b>Living.....</b>	<b>34</b>
8.1	Connections.....	34
8.2	Ventilation .....	35
8.3	Sliding door.....	36
8.4	Seats, rotating .....	37
8.5	Bench.....	38
8.6	LED lighting strips under the bed .....	41
8.7	Pop-up roof.....	42
8.8	Storage box (optional) .....	46
8.9	Table .....	47
8.10	Roof rail .....	48
8.11	Luggage net.....	48
8.12	Textile roof cupboard (optional).....	49
<b>9</b>	<b>Gas system .....</b>	<b>50</b>
9.1	Basic safety instructions.....	50
9.2	Gas bottle .....	51
9.3	Establishing the gas connection.....	51

9.4	Changing gas bottles.....	52
9.5	Gas isolator tap .....	52
<b>10</b>	<b>Electrical system .....</b>	<b>53</b>
10.1	General safety instructions.....	53
10.2	12 V power supply .....	53
10.3	Transformer/rectifier (EBL 119) .....	55
10.4	Panel LT 104.....	57
10.5	230 V power supply.....	59
10.6	Fuses .....	59
<b>11</b>	<b>Appliances .....</b>	<b>63</b>
11.1	General.....	63
11.2	Diesel independent vehicle heater (special equipment).....	63
11.3	Diesel independent vehicle heater operating panel .....	64
11.4	Gas cooker .....	64
11.5	Icebox (special equipment).....	66
11.6	External shower (special equipment) .....	67
<b>12</b>	<b>Care .....</b>	<b>68</b>
12.1	External care .....	68
12.2	Interior care .....	68
12.3	Care instructions for the pop-up roof .....	69
12.4	Winter care .....	69
12.5	Laying up .....	70
<b>13</b>	<b>Maintenance .....</b>	<b>73</b>
13.1	Official inspections .....	73

13.2	Inspection work .....	73
13.3	Maintenance work .....	73
13.4	Spare parts .....	74
13.5	Vehicle identification plate.....	75
13.6	Warning and information stickers.....	75
13.7	Changing tyres .....	75
14	Troubleshooting.....	76
14.1	Electrical system .....	76
14.2	Gas system.....	78
14.3	Cooker .....	78

# 1 Guarantee

## 1.1 Conditions for leakproof guarantee

1. In addition to the legal guarantee and product warranty rights due to the customer, Dethleffs GmbH & Co. KG may also grant a guarantee of six years that the vehicles constructed by the company are sealed in such a manner that moisture cannot penetrate from the outside into the interior of the vehicle. This applies to **the closed pop-up roof, the socket cut-out and the roof rail**. There are no warranty obligations if the leak is caused by improper handling or improperly repaired damage. Damage that is caused by forces of nature (e.g. flooding) is not covered by the guarantee. The guarantee extension includes only the correct repair work. Conversion or diminution as well as travelling expenses or other indirect costs are not covered by the guarantee.
2. When dealing with a case of leakage covered under the conditions of this guarantee, Dethleffs GmbH & Co. KG is obliged to rectify the defective vehicle part concerned by repairing it free of charge or replacing the part, depending on what is necessary to immediately to repair the damage. Defects are to be rectified by Dethleffs GmbH & Co. KG or by an authorised specialist workshop in accordance with the guidelines of Dethleffs GmbH & Co. KG.
3. The prerequisite for this guarantee is that the vehicle must be presented once a year

to an authorised specialist workshop for an inspection. It must be presented annually  $\pm$  6 months after the anniversary of the first registration (or assumption of ownership). If the inspection is not carried out according to schedule, this will nullify your warranty. It cannot be renewed by carrying out an inspection at a later time.

**As proof that the inspection has been carried out, it must be confirmed by the respective Dethleffs trading partner by way of a stamp, date and signature on the page provided in this instruction manual. An entry for this in the GA online portal is also mandatory.**

4. The warranty commences on the date of the vehicle's first registration or the end user's assumption of ownership, at the latest 18 months following delivery to the dealer, and applies to the time during which the vehicle is serviceable, up to a maximum **6 years**. If initial registration of the vehicle precedes taking delivery, the warranty commences on the vehicle's initial registration date (warranty qualifying date). A change of ownership of the purchased object has no effect on the guarantee obligations. The warranty expires if one of the deadlines provided in sections 3 and 6 is not met. The performance of guarantee work does not increase the guarantee period.
5. Parts installed to rectify faults are also guaranteed under the terms of the guarantee until the guarantee period expires.

6. If a leakage occurs, the owner must notify Dethleffs GmbH & Co. KG or a Dethleffs dealer of this in writing within 14 days of its detection. The warranty certificate must be enclosed with the notice. If notification of leakage does not occur within the time limit stated, no claims can be made under the terms of the guarantee. Remedying of leakage will take place after approval has been given by Dethleffs GmbH & Co. KG.
7. The costs of the inspection are to be paid by the party covered by the guarantee.
8. As far as legally permissible, the court responsible for Isny will be agreed upon as the venue for jurisdiction.

## 1.2 Water ingress test

### 1.2.1 Inspection plan

<b>Pos.</b>	<b>Component</b>	<b>Activity</b>
1.1	Closed pop-up roof	Function check, visual check
1.2	Rubber seals and joints	Check for damages
1.3	Socket cut-out	Visual check
1.4	Roof rail	Visual check
1.5	Opening in the kitchen	Visual check

We reserve the right to modify the inspection plan.

## 1.2.2 Inspection records

### Delivery

Date:

Signature and stamp of the dealer:

### 1. Year

Date:

Signature and stamp of the dealer:

Water ingress test 1st year:

- No defects found
- Found defects:

---



---

### 2. Year

Date:

Signature and stamp of the dealer:

Water ingress test 2nd year:

- No defects found
- Found defects:

---



---

### 3. Year

Date:

Signature and stamp of the dealer:

Water ingress test 3rd year:

- No defects found
- Found defects:

---



---

**4. Year**

Date:

Signature and stamp of the dealer:

Water ingress test 4th year:

- No defects found
- Found defects:

---

---

**5. Year**

Date:

Signature and stamp of the dealer:

Water ingress test 5th year:

- No defects found
- Found defects:

---

---

**6. Year**

Date:

Signature and stamp of the dealer:

Water ingress test 6th year:

- No defects found
- Found defects:

---

---

Should it be determined during an inspection that additional work is necessary, then the carrying out of this work is dependent on the customer commissioning this to be done. Please also adhere to the service intervals stipulated by the manufacturers of the individual equipment. Information is included in the service documents enclosed.

## 1.3 Further inspections



The annual inspection is not bound to the 6-year water ingress test, but should nevertheless be carried out annually.

Pos.	Component	Activity	Interval
1	Fault current protection switch	Function check with every connection to the 230 V supply	Semi-annually
2	Joints, hinges	Lubricate	Annually
3	Icebox, heater, cooker, lighting, storage flap and door closures, safety belts	Function check	Annually
4	Cushion	Visual check	Annually
5	Hot-air system	Function check, clean fan wheel if appropriate	Annually
6	Electrical system	Function check	Annually
7	Gas system	Official gas inspection	every 2 years

We reserve the right to modify the inspection plan.

### 1.3.1 Inspection certificates, annual inspection

#### Delivery

Date:

Signature and stamp of the dealer:

#### 1st year

Date:

Signature and stamp of the dealer:

Annual inspection 1st year:

- No defects found
- Found defects:

---



---

**2nd year**

Date:

Signature and stamp of the dealer:

Annual inspection 2nd year:

- No defects found
- Found defects:

---

---

**3rd year**

Date:

Signature and stamp of the dealer:

Annual inspection 3rd year:

- No defects found
- Found defects:

---

---

**4th year**

Date:

Signature and stamp of the dealer:

Annual inspection 4th year:

- No defects found
- Found defects:

---

---

**5th year**

Date:

Signature and stamp of the dealer:

Annual inspection 5th year:

- No defects found
- Found defects:

---

---

Should it be determined during an inspection that additional work is necessary, then the carrying out of this work is dependent on the customer commissioning this to be done. Please also adhere to the service intervals stipulated by the manufacturers of the individual equipment. Information is included in the service documents enclosed.

### 1.3.2 Inspection certificates for electrical inspection



The entire 230 V system must be checked every three years by a qualified electrician in accordance with VDE 0100.

#### 3rd year

Date:

Qualified electrician's signature and stamp:

Entire 230 V system checked:

- No defects found
- Found defects:

---



---

#### 6th year

Date:

Qualified electrician's signature and stamp:

Entire 230 V system checked:

- No defects found
- Found defects:

---



---

## 2 Introduction

**Please read this instruction manual completely before using the vehicle for the first time!**

Always keep this instruction manual in the vehicle. Also inform all other users of the safety regulations.



The non-observance of this symbol can lead to personal injury.



The non-observance of this symbol can lead to damage being caused to, or inside the vehicle.



This symbol indicates recommendations or special aspects.



This symbol indicates actions which lead to environmental awareness.

This instruction manual contains sections which describe model-specific equipment or special equipment. These sections are not specially marked. It may be that your vehicle has not been fitted with this special equipment. In some cases, the actual equipment of your vehicle may therefore be different from that shown in some illustrations and descriptions.

However, your vehicle may be fitted with other special equipment not described in this instruction manual.

Special equipment is described when an explanation is required.

Adhere to the instruction manuals which are separately enclosed.



- The details "right", "left", "front" and "rear" always refer to the vehicle in direction of travel.
- All dimensions and weight details are "approximate".

Should the vehicle be subjected to damage due to a failure to follow the instructions in this instruction manual, then the warranty claim is deemed invalid.

Our vehicles are subjected to continuous development. Please understand that we reserve the right to alter the form, equipment and technology. Therefore, no claims can be made against the manufacturer as a result of the contents of this instruction manual. The equipment which was known and included at the time of going to press is described.

The reprinting, translation and copying, including extracts is not permitted without prior written authorisation from the manufacturer.

## 2.1 General

- The vehicle is constructed in accordance with the latest technology and the recognised safety regulations. Nevertheless, personal injury may result and the vehicle may be damaged if the safety instructions in this instruction manual are not followed.
- Depending on the configuration, the first-aid kit and hazard warning triangle are not included as standard.
- ▶ Equip the vehicle with a first-aid kit and hazard warning triangle before using it for the first time.
- ▶ Only use the vehicle in a technically impeccable condition. Follow the instructions in the instruction manual.
- Malfunctions which impair the safety of persons or the vehicle should be immediately remedied by qualified personnel. To avoid further damages, observe the duty to avert, minimise or mitigate loss for the user during faults.
- Have the vehicle's braking and gas systems inspected and repaired by an authorised specialist workshop only.
- Alterations to the body are only to be carried out with the authorisation of the manufacturer.
- The vehicle is designed for the exclusive transport of persons. Luggage and accessories may only be transported up to the maximum permissible gross weight.
- Observe the test and inspection periods stipulated by the manufacturer.

## 2.2 Environmental tips

- Do not impair the tranquillity and spruceness of nature.
- Remember that: All kinds of waste water and household waste are not to be disposed of in drains or in the open countryside.
- Separate household waste according to glass, tin cans, plastic and wet waste also when on a journey. Enquire at the town or community authority about disposal points. Household waste is not to be disposed of in waste paper baskets which are situated at car parks.
- Empty waste bins as often as possible into the cans or containers that are provided for this purpose. This helps to avoid unpleasant smells and an accumulation of rubbish on board.
- When parked, do not allow the engine to run more than necessary. When running idle, a cold engine releases more contaminants than usual. The running temperature of the engine is achieved more quickly whilst the vehicle is in motion.
- When staying in towns and communities for longer periods, search for parking areas which are especially designated for motor-homes. Enquire at the town or community authority about parking spaces.
- Always leave the parking places in a clean condition.

## 3 Safety

### 3.1 Fire prevention

#### 3.1.1 Avoidance of fire risks



- Never leave children in the vehicle unattended.
- Keep flammable materials clear of heating and cooking appliances.
- Lights can get very hot. When the light is switched on, a safety distance of 30cm to combustible material has to be maintained. Fire hazard!
- Never use portable heating or cooking appliances.
- Only authorised qualified personnel may modify the electrical system, the gas system or the appliances.
- The gas cooker's flames must always be covered with saucepans or pans. Never use the gas cooker without saucepans or pans.

#### 3.1.2 Fire-fighting



- Always carry a dry powder fire extinguisher in the vehicle. The fire extinguisher must be approved, tested and close at hand.



- Have the fire extinguisher tested at regular intervals by authorised qualified personnel. Observe the date of testing.
- The fire extinguisher is not included in the scope of delivery <sup>1)</sup>.
- Always keep a fire blanket at hand near the cooker.

- 1) The fire extinguisher is included in the scope of delivery in some countries.

The fire extinguisher (Fig. 1,1) is located behind the driver's seat.

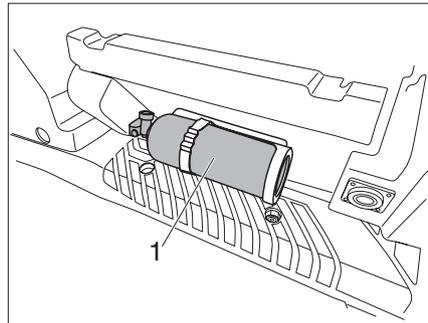


Fig. 1 Fire extinguisher

#### 3.1.3 In case of fire



- ▶ Evacuate all passengers.
- ▶ Cut off the electrical power supply and disconnect from the mains.
- ▶ Close regulator tap on the gas bottle.
- ▶ Sound the alarm and call the fire brigade.
- ▶ Fight the fire if this is possible without risk.



- ▶ Keep escape routes clear.
- ▶ Observe the fire extinguisher instructions for use.

## 3.2 General



Fig. 2 Ventilation in the vehicle



- The oxygen in the vehicle interior is used up by breathing and the use of gas operated appliances. That is why the oxygen needs to be replaced on a constant basis. For this purpose, ventilation grilles must be installed in the vehicle. Forced ventilation is ensured when the pop-up roof is open.
  - ▶ Never cover or block forced ventilations from inside or outside with objects as e.g. a winter mat.
  - ▶ Keep forced ventilations clear of snow and leaves. There is a danger of suffocation due to increased CO<sub>2</sub> levels.
- Observe the headroom of the doors.



- Electric cables are laid in the floor. Never drill holes or screw screws into the floor. Risk of electric shock or short circuit due to a damaged cable.
- The ventilation grilles (Fig. 11.1) must not be used while driving.



- The respective instruction manuals and operating manuals are authoritative for the appliances (heater, cooker, icebox etc.) as well as for the basic vehicle (engine, brakes etc.). It is imperative that they be observed.
- Fitting accessories or special equipment can alter the dimensions, weight and road behaviour of the vehicle. Some of the parts must be entered in the vehicle papers.
- Only use wheel rims and tyres which are approved for the vehicle.



- Information concerning the size of the approved wheel rims and tyres is included in the vehicle documents or can be obtained from authorised dealers and service centres.
- Firmly apply the handbrake when parking the vehicle or use the electric parking brake.
- When leaving the vehicle, it is imperative that all doors, external flaps and windows are closed.
- Hazard warning triangle and first-aid kit conforming to DIN13164 are prescribed by law and must be carried on the vehicle.
- Only move the vehicle on the road if the driver has a driver's license valid for the vehicle class.
- When selling the vehicle, hand over all instruction manuals for the vehicle and the fitted appliances.

### 3.3 Road safety



- Before commencing the journey, carry out a functional check of indicating and lighting equipment, the steering and the brakes.
- After the vehicle has been standing for a longer period (approx. 10 months) have the braking and gas systems checked by an authorised specialist workshop.
- Fold in the pop-up roof fully and lock it into place before commencing the journey.
- Before starting the journey, rotate the seat in the direction of travel and lock in position. The rotating seats must remain locked in the direction of travel during the journey.
- During the journey, persons must only sit on the permitted seats (see chapter 5). The authorised number of seats is stipulated in the vehicle documents.
- Before starting the journey fasten your seat belt and keep it fastened during the journey.
- Always secure children with the child-protection equipment that is mandatory for the respective child's size and weight.



- Deactivate the passenger airbag if a rear-facing child safety system is used on the passenger seat.
- Only attach child restraint systems to seats with factory-fitted three-point belts or to the ISOFIX fastenings.
- Note the total height of the vehicle (including roof loads and roof structures) when entering underpasses, garages, multi-storey car parks and such like.
- In winter, the roof must be free of snow and ice before commencing the journey.



- Before commencing the journey, distribute the vehicle payload evenly (see Chapter 4).
- When loading the vehicle and when taking a rest from driving, in order to load luggage or food, for example, observe the maximum permissible gross weight and axle loads (refer to vehicle documents).
- Before commencing the journey, ensure that all cupboard doors and all drawers and flaps are secure.
- Close the window before setting off.
- Before commencing the journey, close all external flaps and lock them.



The 5-star NCAP test of the basic vehicle is no longer valid for the Dethleffs Globevan due to the conversion.

### 3.4 Towing



- Care is to be taken when connecting and detaching a trailer. Risk of accident and injury!
- No persons are to be between the towing vehicle and the trailer during positioning for connecting and detaching.

## 3.5 Gas system

### 3.5.1 General information



- Close the gas isolator tap and the regulator tap before commencing the journey and when leaving the vehicle.
- No appliance (e.g. heating) that is operated through the built-in burner may be operational while fuel is being filled up, on ferries or in the garage. Danger of explosion!
- If an appliance is operated through a burner, do not start the appliance up in closed areas (e.g. garages). Danger of poisoning and suffocation!
- Have the gas system serviced, repaired or altered by an authorised workshop only.
- Have the gas system checked by an authorised specialist workshop before starting up and according to the national regulations. This also applies for not registered vehicles. For modifications to the gas system have the gas system immediately checked by an authorised specialist workshop.



- The gas pressure regulator must also be checked. The gas pressure regulator has to be replaced at least every 10 years. The vehicle owner is responsible for seeing that this is carried out.
- In case of a defect of the gas system (gas odour, high gas consumption) there is danger of explosion! Close the regulator tap on the gas bottle immediately. Open doors and windows and ventilate well.
- In case of a defect in the gas system: Do not smoke; do not ignite any open flames, and do not operate electric switches (light switches etc.).
- Have the defect in the gas system repaired by an authorised specialist workshop.
- Do not use the gas cooker for heating purposes.
- When the vehicle or gas appliance is not in use, close the main shut-off valve on the gas bottle.



- Regularly inspect the gas tube fitted to the gas bottle connection for tightness. The gas tube must not have any tears and must not be porous. Have the gas tube replaced in an authorised workshop no later than 10 years after the manufacturing date. The operator of the gas system must see to it that the parts are replaced.
- Due to its function and construction, the gas bottle compartment is a space which is open to the exterior. Never cover or block the standard forced ventilation. Otherwise leaking gas cannot be dispersed to the outside.
- Do not use the gas bottle compartment as storage space as it is not moisture-proof.
- The regulator tap on the gas bottle must be accessible.

### 3.5.2 Gas bottle



- Gas bottles is only to be transported within the designated gas bottle compartment.
- Place gas bottle vertically in the gas bottle compartment.
- Tie down gas bottle so that it is unable to turn or tilt.
- Close the regulator tap on the gas bottle before the gas pressure regulator or gas tube are removed from the gas bottle.
- Use your hands only to connect the gas pressure regulator or the gas tube to the gas bottle. Do not use any tools.
- Only use special gas pressure regulators with safety valves for use in vehicles (included in the scope of delivery status for a new vehicle, Fig. 58,4).
- Use only gas bottles up to 1.8 kg, including gas bottle valves with safety device (e.g. blue CAMPINGGAZ bottles R904). A gas bottle valve with safety device is not part of the CAMPINGGAZ bottle. The Dethleffs Globevan is optimised for the CAMPINGGAZ bottle. Other gas bottles of the same design have not been tested.
- Never block the ventilation openings in the floor under the gas bottles.
- Make sure that the gas ventilation system is complete.

### 3.6 Electrical system



- Only allow qualified personnel to work on the electrical system.
- Prior to carrying out work on the electrical system, switch off all devices and lights, disconnect the battery and disconnect the vehicle from the mains.
- Only use original fuses with the stipulated values.
- Only replace defective fuses when the cause of the defect is known and has been remedied.
- Never bridge or repair fuses.

## 4 Before the journey

### 4.1 Payload



- Excessive payload and the wrong tyre pressure can cause the tyre to burst. You can lose control of the vehicle.
- Adapt your speed to the payload. The stopping distance is longer when the payload is higher.



- The maximum permissible gross weight stated in the vehicle documents is not to be exceeded by the payload.
- Built-in accessories and special equipment reduce the payload.
- Adhere to the axle load stated in the vehicle documents.

On loading, make sure that the payload's centre of gravity is as low as possible (directly above the floor of the vehicle). Otherwise this may affect the driving characteristics of the vehicle.

### 4.1.1 Terms



In technical and scientific texts the term "mass" has replaced the term "weight". However the term "weight" is still the more common term in general usage. To contribute toward understanding the term "mass" is therefore only used in established phrases in the following passages.

#### Maximum permissible gross weight in a laden condition

- The maximum permissible gross weight in a laden condition is the weight that a vehicle may never exceed.
- The maximum permissible overall weight in laden condition consists of the mass in ready-to-drive condition and of the payload.
- The manufacturer has specified the maximum permissible gross weight in a laden condition in Field F.1 of the vehicle documents.

#### Mass in ready-to-drive condition

The manufacturer specifies the mass in ready-to-drive conditions in Field G of the vehicle documents.

#### Payload

The payload is made up as follows:

- Conventional load
- Additional equipment
- Personal equipment

Explanations of the individual components of the payload are contained in the following text.

### **Conventional load**

The conventional load is the weight specified by the manufacturer for the passengers.

Conventional load means: 75 kg are calculated for every seat specified by the manufacturer, regardless of how much the passengers actually weigh. The driver's seat is already included as part of the mass in ready-to-drive condition and must not be calculated as part of the conventional load.

The manufacturer specifies the number of seats in Field S.1 of the vehicle documents.

### **Additional equipment**

Additional equipment includes accessories and special equipment. Examples of additional equipment include:

- Tow coupling
- Roof racks
- Awning
- Bike or motorcycle rack

Information about the weights of the various special equipment devices can be obtained from the manufacturer.

### **Personal equipment**

Personal equipment includes all items in the vehicle that are not included in the conventional load and the additional equipment. For example, personal equipment can include the following:

- Foodstuffs
- Crockery
- Television
- Radio
- Clothes
- Bedding
- Toys
- Books
- Toiletries

No matter where kept, personal equipment also includes:

- Animals
- Bikes
- Boats
- Surfboards
- Sports equipment

## 4.1.2 Calculating the payload



- Payload calculation at the manufacturer is partly based on all-inclusive weights. For safety reasons, the maximum permissible gross weight in a laden condition must not be exceeded.
- Only the maximum permissible gross weight and the mass in a ready-to-drive condition, not the actual weight of the vehicle, is stated in the vehicle documents. For your own safety, we recommend that you have your loaded vehicle (with passengers) weighed on a public weighbridge before you set out on your journey.

The payload (see chapter 4.1.1) is the weight difference between

- Maximum permissible gross weight in a laden condition and
- Vehicle mass complete in a ready-to-drive condition.

Example for calculating the payload:

	mass in kg to be calculated	Calculation
Maximum permissible gross weight according to vehicle documents, Field F.1	3100	
Vehicle mass in a ready-to-drive condition, including basic equipment according to vehicle documents, Field G	- 2520	
<b>this results in a permissible payload of</b>	<b>580</b>	
Conventional load, e.g. 3persons at 75kg each	- 225	
Additional equipment	- 40	
<b>for the personal equipment this results in</b>	<b>= 315</b>	

The calculation of the payload from the difference between the maximum permissible gross weight in laden condition and the mass specified by the manufacturer in ready-to-drive condition is however only a theoretical value.

The actual payload can only be determined if the vehicle is weighed on a weighbridge with a full fuel tank, full gas bottle and all additional equipment.

### 4.1.3 Loading the vehicle correctly



- To ensure safety never exceed the maximum permissible gross weight in a laden condition.
- Distribute the load evenly between the left-hand and right-hand sides of the vehicle.
- Distribute the load evenly between both axles. Observe the axle loads specified in the vehicle documents. Additionally observe the permissible load-carrying capacity of the tyres.
- Securely store all the objects so that they cannot slide or slip.
- Stow heavy objects (awning, canned food etc.) near the axle. Low-lying storage compartments whose doors do not open in the direction of travel are particularly suited for storing heavy objects.
- Store lighter objects (laundry) in the roof storage compartments.

### 4.1.4 Roof load



A roof rack is optionally available from Custom Parts. Assembly details and the available roof load with respect to the pop-up roof can be found in the instruction manual for the roof rack. We recommend professional installation in a suitable workshop. Dethleffs GmbH & Co. KG accepts no liability for any damage if the approved roof load is exceeded. The Dethleffs Globevan roof rack has been tested with a City-Crash together with TÜV Rheinland.



- ▶ Do not open the pop-up roof when it is loaded.

### 4.2 Road safety



- ▶ Check the tyre pressure before a journey and at 2-week intervals. Wrong tyre pressure causes excessive wear and can lead to damage or even to tyre burst. You can lose control of the vehicle.

► Work through the following checklist before setting off:

#### Base vehicle

No.	Checks	checked
1	All vehicle documents are on board	
2	Tyres in proper condition	
3	Vehicle lighting, brake and reversing lights function	
4	Oil level at engine, gear unit and power steering checked	
5	Coolant and liquid for windshield washer system topped up	
6	Breaks function	
7	Brakes react evenly	
8	When braking, the vehicle remains on track	

#### Housing body, outside

No.	Checks	checked
9	Awning completely retracted	
10	Roof free of snow and ice (in winter)	
11	External connections and lines disconnected and stored away	
12	Pop-up roof folded in, closed, locked and secured	
13	External flaps and doors closed and locked	

No.	Checks	checked
14	Overall height of the vehicle including roof rack when loaded measured and noted. Keep the height information close at hand in the driver's cabin	

#### Housing body, inside

No.	Checks	checked
15	Loose parts stored away or fixed in position	
16	Open storage spaces empty	
17	All drawers and flaps closed	
18	Child seats on seats with three-point seat belts or ISOFIX	
19	Swivel seat locking mechanism for driver's seat and passenger seat locked in direction of travel	
20	Bench brought into driving position (Both locks are locked and are in the green area - see chapter 8.5)	
21	Bench is mounted behind the individual seats (if fitted)	
22	Shades removed in driver's cabin	
23	Ventilation grilles stowed	
24	External shower pump is switched off, if fitted (see chapter 11.6)	

Before the journey

### Gas system

No.	Checks	checked
25	Regulator tap on the gas bottle and gas isolator tap are closed	

### Electrical system

No.	Checks	checked
26	<ul style="list-style-type: none"><li>▶ Check the battery voltage of the starter battery and the living area battery (see Chapter 10).</li></ul> <p>If the panel indicates that the battery voltage is too low, the respective battery has to be recharged. Observe the instructions in Chapter 10.</p> <ul style="list-style-type: none"><li>▶ Commence the journey with a fully charged starter battery and living area battery.</li></ul>	

## 5 During the journey

### 5.1 Driving with the Dethleffs Globevan



- ▶ Always wear a seat belt during the journey at those seats where a seat belt is mounted.
- ▶ Only use seats equipped with seat belts while driving.
- ▶ Never open the seat belt during the journey.
- ▶ Passengers must remain in the seats provided.
- ▶ The door lock may not be opened.



- ▶ Drive slowly on bad roads.



- If an accident occurs as a result of these instructions not being observed, the manufacturer will not be responsible for damages caused.
- The safety measures specified in Chapter 3 have to be observed.

### 5.2 Driving speed



- ▶ The vehicle is equipped with a powerful engine. Meaning that you have sufficient power reserves in difficult traffic situations. This high power allows a high end speed and requires above-average driving skills.
- ▶ The vehicle provides a huge surface exposed to wind. Particular danger arises when a side wind suddenly occurs.
- ▶ Uneven or one-sided loading changes the road behavior.
- ▶ On unknown roads the road surface conditions may be difficult and unexpected traffic situations may arise. Therefore adapt your driving speed to the respective traffic situation and the ambient situation for your safety.
- ▶ Observe the statutory speed limits that apply in the respective country.

### 5.3 Seat belts

The vehicle is equipped with automatic three-point safety belts at those seats in the living area for which a seat belt is stipulated by law. ISOFIX fastenings are attached to the rear bench seats. The corresponding national regulations apply for using a seat belt.



- ▶ Before starting the journey fasten your seat belt and keep it fastened during the journey.
- ▶ Do not damage or clamp in the belts. Have damaged seat belts replaced by an authorised specialist workshop.
- ▶ Do not change the belt attachment points, the automatic retractor and the belt locks.
- ▶ Check the screwed connections of the seat belts at intervals in order to ensure that they are firmly seated.
- ▶ Use each seat belt for one adult person only.
- ▶ Do not belt up objects together with persons.



- ▶ Seat belts are not sufficient for persons who are less than 150 cm tall. In this case use additional retention devices. Observe the test certificates.
- ▶ Factory-set three-point safety belts must be used when attaching child restraint systems.
- ▶ Replace (have replaced) the seat belts that were in use during an accident.
- ▶ Do not tilt the backrest of the seat too far back during the journey. Otherwise the effectiveness of the seat belt is no longer ensured.

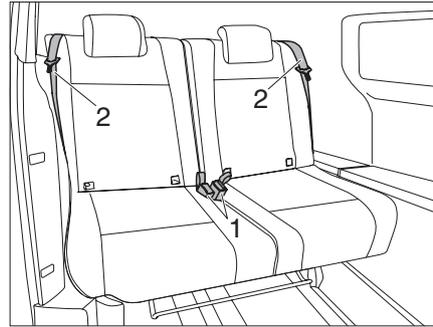


Fig. 3 Bench with integrated belts

- 1 Belt buckle
- 2 Seat belt

### 5.3.1 Using the seat belt correctly



- ▶ Do not twist the belt. The belt must be positioned smoothly against the body.
- ▶ Before applying the seat belt, adopt the correct sitting position.

## 5.4 Driver's seat and front passenger's seat



- ▶ Before starting the journey, rotate the seat in the direction of travel and lock in position.
- ▶ Lock the seats in the direction of travel and do not turn them during the journey.



- Depending on the model, rotating seats may not be available.
- The driver's and front passenger's seat are a part of the base vehicle, depending on model and vehicle equipment. In this case the adjustment of the seats is described in the operating instructions of the base vehicle.

## 5.5 Seating arrangement



- ▶ During the journey, persons are only to sit on the permitted seats. The authorised number of seats is stipulated in the vehicle documents.
- ▶ Wearing of seat belts is compulsory at all seats.
- ▶ Only insert individual seats (special equipment) **in front of** the sleeper bench seat, never behind it.
- ▶ Single seats must be positioned opposite to the direction of journey when third row seats or bench seats are used at the same time.

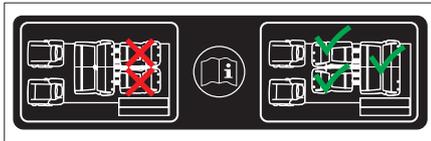


Fig. 4 Placement of individual seats

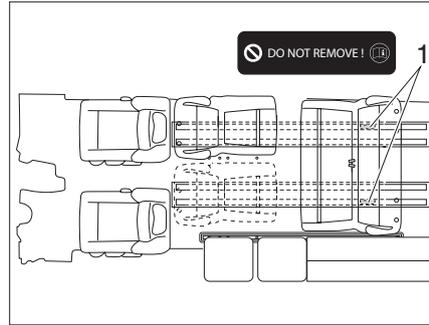


Fig. 5 Bed couch correctly fitted

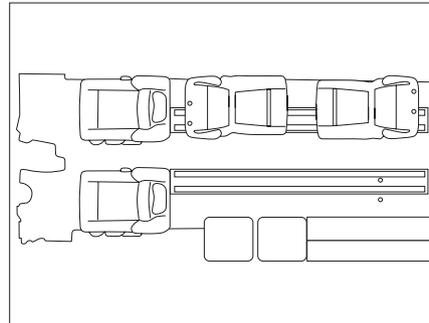


Fig. 6 Single seats correctly fitted

To limit the movement of the seats, a limiting plate (Fig. 5,1) is mounted in the rail-in rails.



- This sleeper bench seat is not a system with an automatic lock.
- ▶ Only fasten the sleeper bench seat when the vehicle is stationary and never during the journey. This also applies to the optional individual seats (see section 8.5).
  - ▶ Only use the bench in the front area in front of the limiting plate (Fig. 5,1) of the rail-in rails. In the rear area, the use of the bench is not permitted.
  - ▶ Do not remove the limiting plate (Fig. 5,1) (Do not remove!).
  - ▶ Always ensure that there is adequate seat clearance (leg room) with regard to the front seat.

## 5.6 Operating the heater and cooker



- ▶ When refuelling, on ferries or in the garage, no appliance (e.g. heater or cooker) may be in operation if it is operated via the built-in burner. Danger of explosion!

- ▶ Refer to the instruction manual for the base vehicle for the position of the fuel filler neck.

## 6 Dethleffs Globevan setting up

### 6.1 Handbrake



► The vehicle can move when the parking brake is released, e.g. when it is on chocks.

► Firmly apply the handbrake when parking the vehicle.



An applied handbrake can prevent the driver's seat from turning.

- Apply the service brake.
- Briefly release the parking brake.

### 6.2 230 V connection

The vehicle can be connected to a 230 V power supply (see Chapter 10).

### 6.3 Icebox (special equipment)



- Operate the icebox only with 12 V via the living area battery.
- Pay attention to the 12 V connection of the icebox (see chapter 11.5).

## 7 Overview of fittings and electrical components

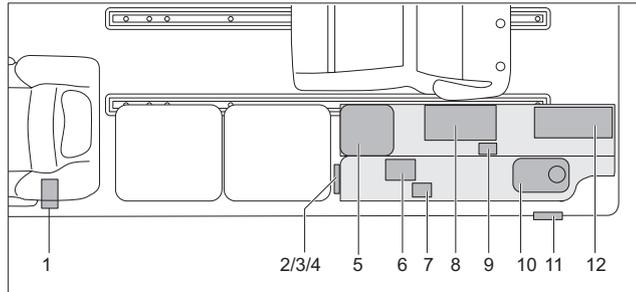


Fig. 7 Overview of fittings and electrical components

Pos.	Component	see chapter
1	Main fuses 12 V	10.6.1
2	Panel LT 104	10.4
3	Interior connections	8.1.1
4	Diesel independent vehicle heater operating panel	11.3
5	Gas bottle compartment with gas bottle	9
6	Transformer/rectifier (EBL 119)	10.3
7	230 V fuse	10.6.3
8	Living area battery	10.2.1
9	Fuses on the living area battery	10.6.2
10	Water tank for external shower	11.6
11	230 V connection	8.1.2
12	Gas cooker	11.4

## 8 Living

### 8.1 Connections

#### 8.1.1 Interior connections

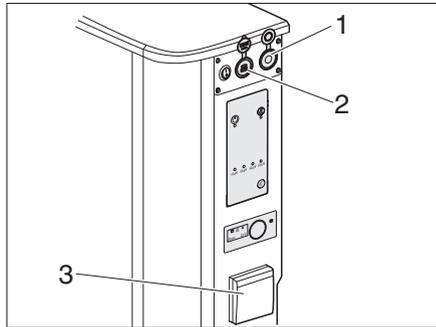


Fig. 8 Terminal strip

► The following connections are located on the left side of the vehicle:

- 12 V connection (Fig. 8,1)
- 2 USB ports (Typ A and typ C) (Fig. 8,2)
- 230 V socket (Fig. 8,3)

#### 8.1.2 Flap for 230 V connection, square

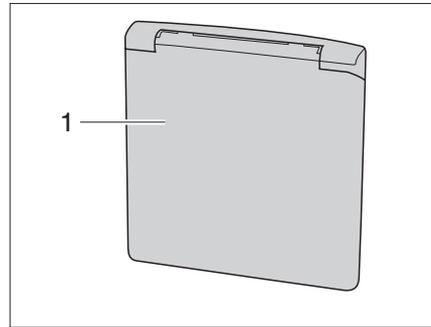


Fig. 9 Flap for 230 V connection

Opening:

- Grip the external flap (Fig. 9,1) at the bottom and lift it upwards.

Closing:

- Swivel the external flap (Fig. 9,1) downward and press it shut.

## 8.2 Ventilation



The oxygen in the vehicle interior is used up by breathing and the use of gas operated appliances. That is why the oxygen needs to be replaced on a constant basis. Ventilation grilles can be inserted into the vehicle window for this purpose. Forced ventilation is ensured when the pop-up roof is open.

- ▶ Never cover or block forced ventilations from inside or outside with objects as e.g. a winter mat.
- ▶ Keep forced ventilations clear of snow and leaves. There is a danger of suffocation due to increased CO2 levels.



Although sufficient ventilation is provided, in certain weather conditions, condensation can form on metal objects (e.g. screwed connections in the floor).



Stow the ventilation grille (Fig. 11,1) safely while driving.

### Installing the ventilation grilles

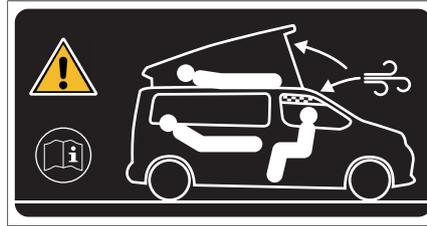


Fig. 10 Ventilation in the vehicle

The ventilation grilles ensure a constant exchange of oxygen inside the vehicle when the Dethleffs Globevan is parked.

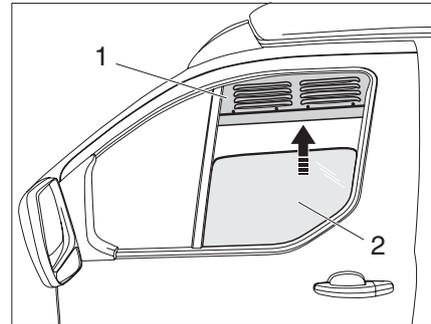


Fig. 11 Insert ventilation grille

- ▶ Wind down the vehicle window (Fig. 11,2).
- ▶ Insert the ventilation grille (Fig. 11,1) into the window frame at the top.

- ▶ Carefully move the vehicle window up in inching mode until it rests in the slots in the ventilation grille.



Do not use the window winder's automatic function.



If the vehicle window is moved too hard into the ventilation grille, the anti-trap function may cause the vehicle window to move down again.

### Condensation



- ▶ Ensure that there is a continuous exchange of air by providing frequent and efficient ventilation. This is the only method for ensuring that condensation is not formed during cool weather.

During the colder season, a pleasant living climate is created if heating output, air distribution and ventilation are synchronised.

- ▶ To avoid draft close the air outlet nozzles on the dashboard and set the air distribution of the base vehicle to air circulation.

When the vehicle is parked for a long time and especially in summer, ventilate it well every now and then otherwise heat may build up.

### 8.3 Sliding door



- Ensure when closing the sliding door that no fingers or other body parts are clamped in.
- No-one may be within the closing area of the sliding door when it is being closed.
- Ensure that children do not use the sliding door without supervision.
- Deactivate the child lock in the Dethleffs Globevan when the vehicle is occupied (emergency exit).
- Follow the vehicle manufacturer's instruction manual for the electric sliding door (special equipment).

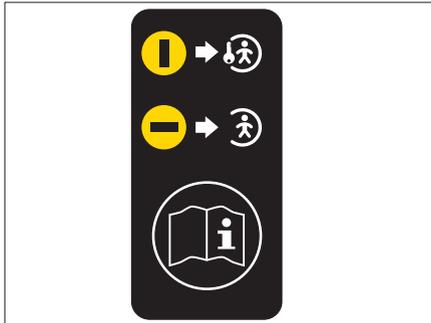


Fig. 12 Child lock

#### Activating/deactivating the child lock

The rotary knob for the child lock (Fig. 13,1) is located in the closing edge of the sliding door.

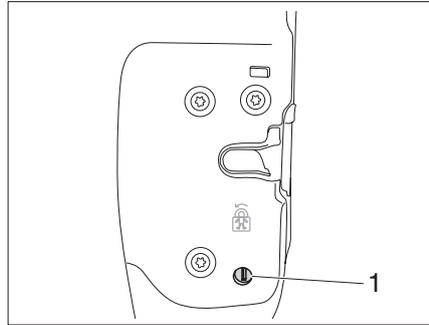


Fig. 13 Activating/deactivating the child lock

1 Rotary knob for child lock

- ▶ Insert the car key into the slot of the rotary knob (Fig. 13,1).
- ▶ Turn the knob a quarter of a turn.

## 8.4 Seats, rotating



- ▶ Before starting the journey, rotate the seat in the direction of travel and lock in position.
- The rotating seats must remain locked in the direction of travel during the journey.
- The vehicle can move when the parking brake is released, e.g. when it is on chocks.



The seats are easiest to rotate when no-one is sitting on them.

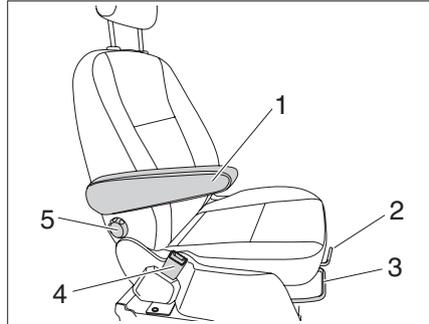


Fig. 14 Driver's seat and front passenger's seat

- 1 Armrest
- 2 Release lever for turning mechanism
- 3 Bar for lengthways adjustment
- 4 Belt buckle
- 5 Adjustment wheel for backrest adjustment

### Seats, rotating

The turning direction is towards the centre of the vehicle. The seats can only be locked in position in the direction of travel.

- ▶ Raise the armrest (Fig. 14,1).
- ▶ Pull the bar (Fig. 14,3) and push the driver's seat/passenger seat forward.
- ▶ Pull the release lever (Fig. 14,2) and turn the seat.



- ▶ To make it easier to turn the seats, open a door gap.

### Adjusting an appropriate seating position

The position of the seats can be adjusted. The handles which are required for this purpose are positioned to the front of the seat.

- ▶ Pull the bar (Fig. 14,3).  
The seat can be moved forward or backward.
- ▶ Rotate the adjustment wheel (Fig. 14,5) for the backrest adjustment.  
The angle of the backrest can be adjusted.

## 8.5 Bench

### 8.5.1 Converting the bench



Risk of toppling, especially when folded!

- ▶ Only move the bench when there are no persons on it.
- ▶ Make sure that the locking pins of the locks engage in the lower position.



Danger of bruises!

When locking and unlocking the bench seat, make sure that no limbs are crushed.

The bench can be converted for sleeping if required.

- ▶ Push the locking pins (Fig. 16,1) under the bench (Fig. 16,2) slightly downwards and pull. The locking mechanism releases itself.
- ▶ Push the bench (Fig. 16,2) forward and lock the locking pins (Fig. 16,1) again.



Fig. 15 Moving the bench

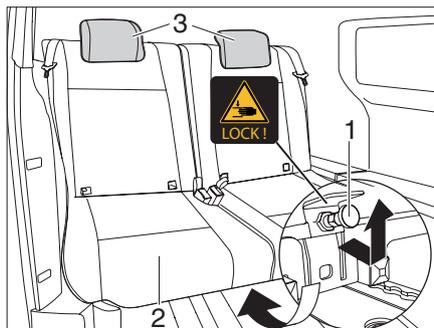


Fig. 16 Bench lock



Pay attention to the red-green labeling! Only when all locks are in the green area, the bench can be used. If the bench is in the red area in the driving and usage condition, the vehicle must not be moved.

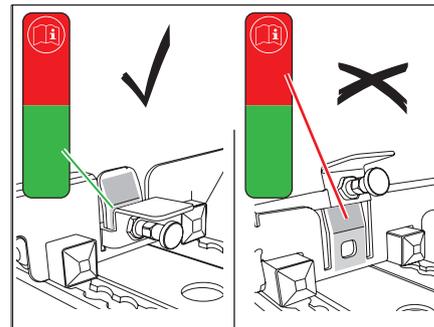


Fig. 17 Position of the locks

- ▶ Press the button and pull the head rests (Fig. 16,3) upwards.
- ▶ Viewed from the front, move the bench forward to hole 17 and lock it.

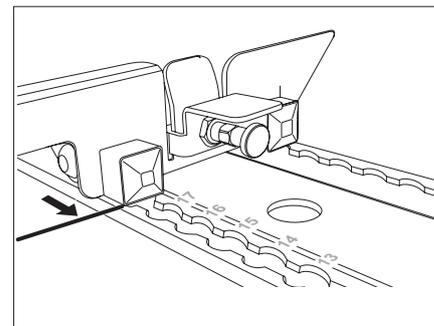


Fig. 18 Position for locking

- Pull the slings (Fig. 19,1) and fold back the bench backrest.

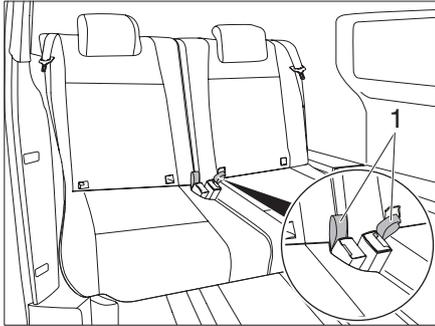


Fig. 19 Tip bench backwards

The bench is now flush with the bed extension (Fig. 20,1).

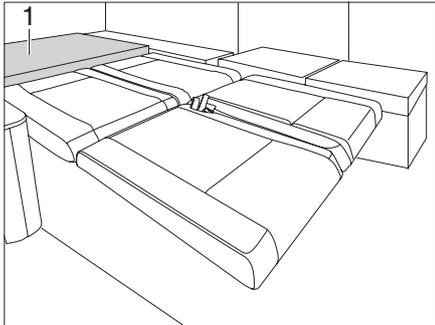


Fig. 20 Bench in sleeping position

## 8.5.2 Variable seat arrangement

The rail system in the floor of the Dethleffs Globevan enables the seats to be arranged variably. The Dethleffs Globevan can be converted after the bed extension has been removed.

### Removing the bed extension (special equipment)

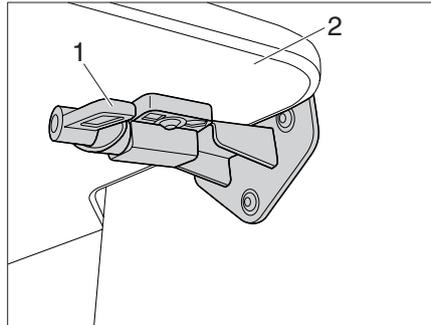


Fig. 21 Bed extension latch (special equipment)

- Rotate the latch (Fig. 21,1) on the left and right of the bed extension (Fig. 21,2) through 180°.

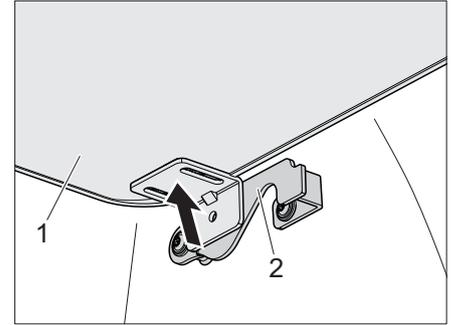


Fig. 22 Journal

- Lift the bed extension (Fig. 22,1) on the left and right out of the holder (Fig. 22,2).
- Remove the bed extension.

### Installing the seat



Fig. 23 Installing the seat

- ▶ Lift the seat (Fig. 23,5) into the rail (Fig. 23,6).

The locking lever (Fig. 23,1) must be in the upper position (for markings and identification see Fig. 16 and Fig. 17).

- ▶ Check that the seat (Fig. 23,5) is properly engaged.
- ▶ Adjust the seat to the desired position.
- ▶ Pull the locking pins (Fig. 23,2) and press the locking lever (Fig. 23,1) down.



There is a risk of toppling if the seat is not locked!  
 These individual seats are not a system with an automatic lock.

- ▶ Only lock the individual seats into place when the vehicle is stationary and never during the journey. This applies also to the sleeper bench seat.

#### Remove seat



The backrest is under strong spring tension!

- ▶ Make sure that no objects or limbs are between the backrest and the seat when the backrest is folded down.

- ▶ Turn the adjustment knob (Fig. 23,4). The backrest (Fig. 23,3) folds forward.
- ▶ Pull the locking lever (Fig. 23,1) upwards.

- ▶ Lift the seat (Fig. 23,5) out of the rail and set it down briefly if necessary.
- ▶ Hold the seat by the seat cushion and backrest (Fig. 23,3) and carry it out of the vehicle.

### 8.5.3 Possible seat arrangements



- ▶ Only insert individual seats (special equipment) **in front of** the sleeper bench seat, never behind it.
- ▶ Always ensure that there is adequate seat clearance (leg room) with regard to the front seat.
- ▶ Single seats must be positioned opposite to the direction of journey when third row seats or bench seats are used at the same time.

The following seat arrangements in the Dethleffs Globevan are possible:

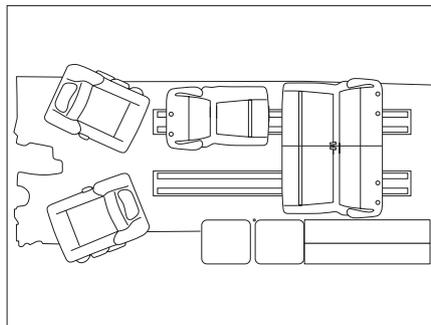


Fig. 24 Five seats with storage box

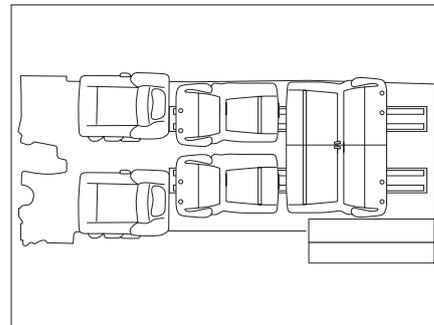


Fig. 25 Six seats without storage box

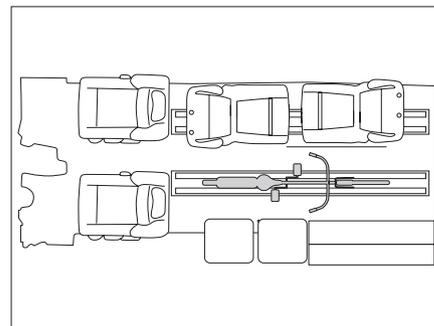


Fig. 26 Three to four seats, bicycle and storage box

## 8.6 LED lighting strips under the bed



Lamps and light fittings can develop heat.

Under the bed there are two LED lighting strips (Fig. 27,1) on the left and right.

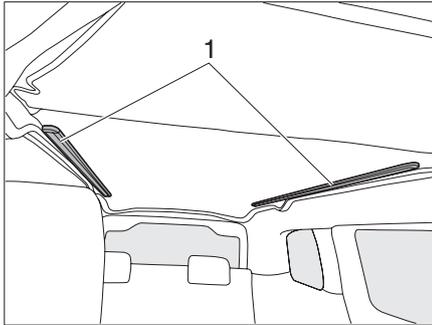


Fig. 27 LED lighting strips under the bed

- ▶ Switch on/off both LED lighting strips (Fig. 27,1) at the button on the entrance (Fig. 28,1) button in the rear (Fig. 29,1) or with the button (Fig. 30,1) on the terminal strip.

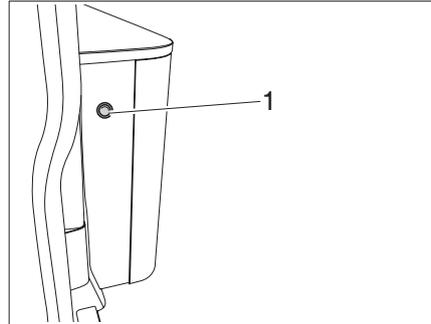


Fig. 28 Button at the entrance

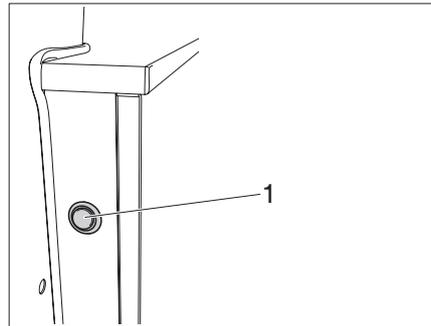


Fig. 29 Button in the rear

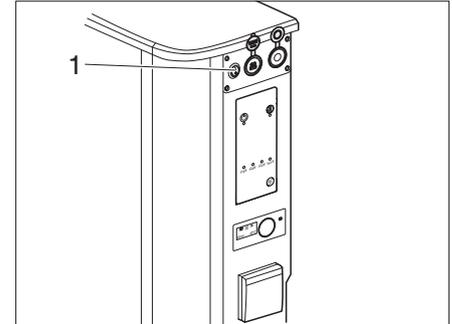


Fig. 30 Button at the entrance left

### Dimmer function

The brightness of the LED lighting strips can be dimmed with the buttons (Fig. 28,1; Fig. 29,1 or Fig. 30,1).

Full brightness:

- ▶ Press the button 1× briefly.

The LED lighting strips light up at full brightness.

Low brightness:

- ▶ Press the button for approximately 3 seconds until the lowest brightness is reached.

Dimming brightness:

- ▶ Keep the button pressed until the desired brightness is reached.

## 8.7 Pop-up roof



- ▶ Fold in the pop-up roof before commencing the journey.



The texture of the pop-up roof's tent fabric has tiny holes. This is quite normal - the holes close as soon as the tent becomes damp and the fibres swell.

Water column for the cloth bellows according to the manufacturer: 100 mm × 24 h

- ▶ Pay attention to the manufacturer's instruction manual and care instructions.

### 8.7.1 Opening the pop-up roof

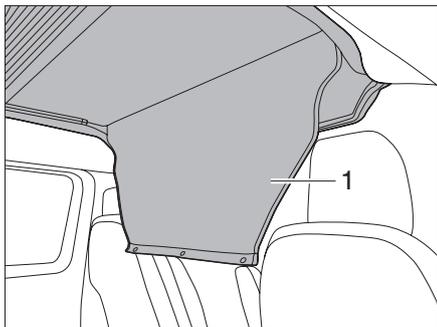


Fig. 31 Rolling up the access cover

- ▶ Open and roll up the access cover (Fig. 31,1).

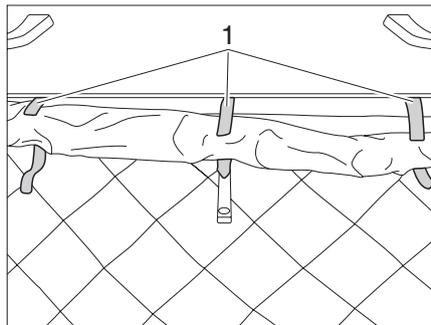


Fig. 32 Opening the Velcro fasteners

- ▶ Open the three Velcro fasteners (Fig. 32,1) of the cloth bellows.

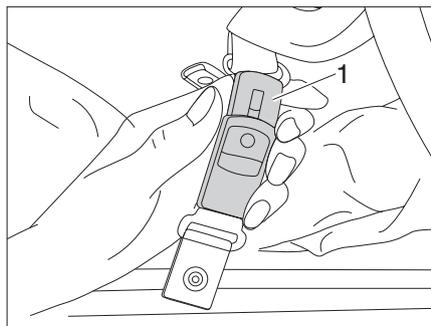


Fig. 33 Opening the securing belt

- ▶ Open the securing belts (Fig. 33,1).

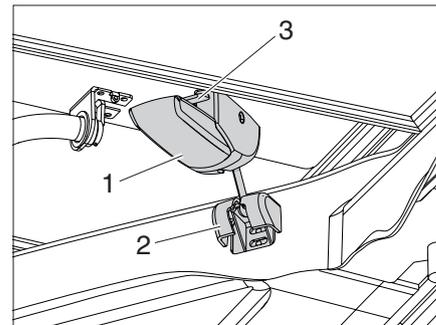


Fig. 34 Releasing the locks on the left and right

- ▶ Push up the locking lever (Fig. 34,3) and at the same time pull down the lock (Fig. 34,1) on the left and right.
- ▶ Remove the pin (Fig. 34,2) from the holder.

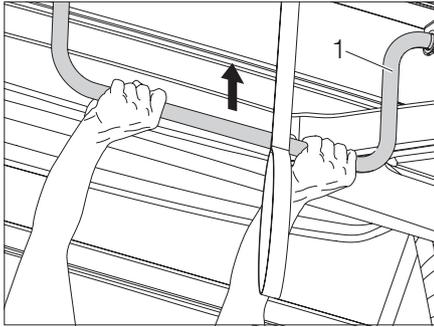


Fig. 35 Pushing up the pop-up roof

- ▶ Push up the pop-up roof by the bar (Fig. 35,1).
- ▶ Fold the bed upwards for standing height.



- ▶ When raising the pop-up roof with the bar, make sure that your hands do not get trapped between the bracket and the bed unit.

### 8.7.2 Using the bed



- The maximum load for the bed in the pop-up roof is 200 kg.
- Only use the bed in the pop-up roof when the safety guard is in position.



- Do not step on the armrests of the driver's or passenger's seat when climbing onto the bed.
- In particular, always make sure that small children under 6 years of age cannot fall off the bed.
- Never leave children on the bed unsupervised or without the safety guard in place.

Preparing the bed:

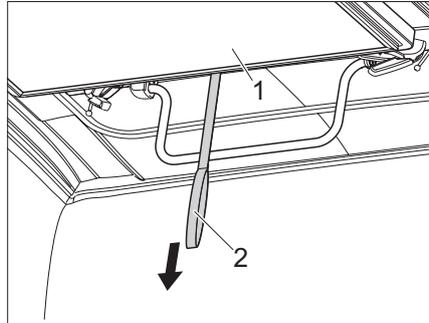


Fig. 36 Pulling down the bed

- ▶ Pull down the bed (Fig. 36,1) by the strap (Fig. 36,2).

### 8.7.3 Fitting the safety guard



Do not fit the safety guard until persons are already in the pop-up roof.

To prevent children falling off the bed, the safety guard can be fitted to the pop-up roof.

#### Hooking in the safety guard

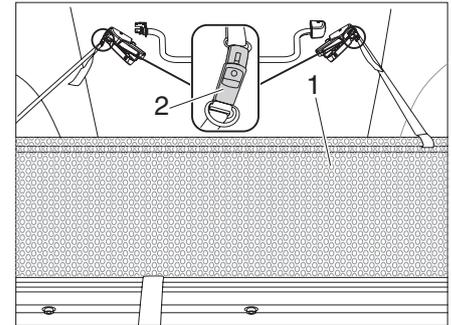


Fig. 37 Safety guard

- ▶ Pull the safety guard (Fig. 37,1) out from under the mattress.
- ▶ Secure the safety guard to the pop-up roof with the strap buckle (Fig. 37,2).

#### Unhooking and stowing the safety guard

- ▶ Releasing the strap buckle (Fig. 37,2).
- ▶ Stow the safety guard (Fig. 37,1) under the mattress.

## 8.7.4 Panorama function in the pop-up roof



Possible damage to the tent fabric and zip.

- ▶ When closing the zip, pull down the pop-up roof so that the zip is not under tension (Fig. 39).

The raised pop-up roof can be opened with a zip.

### Opening the pop-up roof (panorama function)

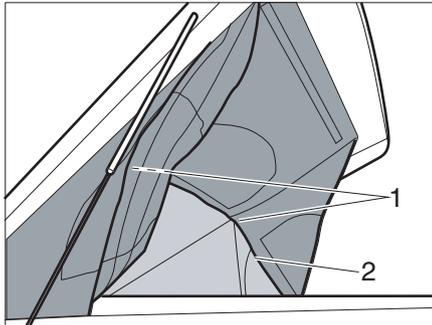


Fig. 38 Panorama function

- ▶ Open the pop-up roof (see chapter 8.7.1).
- ▶ Open the zip (Fig. 38,2) all round the pop-up roof.
- ▶ Secure the side panels and front panel to the pop-up roof with Velcro (Fig. 38,1).

### Closing the pop-up roof

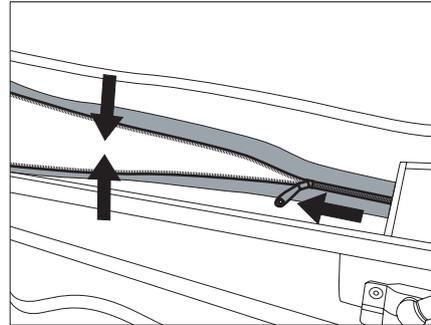


Fig. 39 Relieving the zip

- ▶ Loosen the Velcro fasteners on the side panels and front panel on the top of the pop-up roof.
- ▶ Pull down the pop-up roof slightly and close the zip (Fig. 39).
- ▶ Closing the pop-up roof (see chapter 8.7.5).

### 8.7.5 Closing the pop-up roof



- ▶ Before closing the pop-up roof open at least one door of the vehicle. Material damage may otherwise occur through excess pressure.
- ▶ Pull down the bed (Fig. 36,1) before closing the pop-up roof. Do not pull down the bed and the pop-up roof simultaneously.



- ▶ When closing the pop-up roof ensure that the cloth bellows are not clamped in.
- ▶ Before starting your journey, check whether the locking hooks of the locks (Fig. 43,1) on the left and right are correctly tensioned. If necessary, adjust the lock according to the instructions from the manufacturer SCA.
- ▶ There must be no objects or bedding between the roof shell and the bed unit - risk of damage!
- ▶ The pop-up roof may only be closed with the original mattress.
- ▶ Make sure that the mattress does not protrude to the rear beyond the bed.

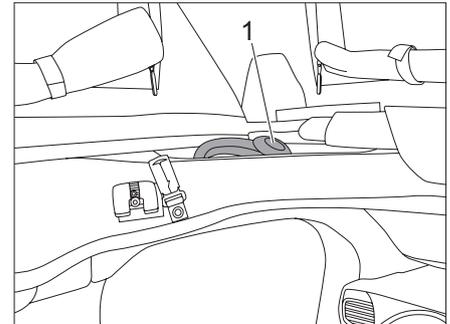


Fig. 40 Stowing the gooseneck lamp (special equipment)

- ▶ Bend the gooseneck lamp (special equipment) (Fig. 40,1) so that it fits into the recess above the driver's seat. The gooseneck lamp must not protrude over the recess or lie on the GRP surface.
- ▶ Unrolling the access cover (Fig. 41,1).

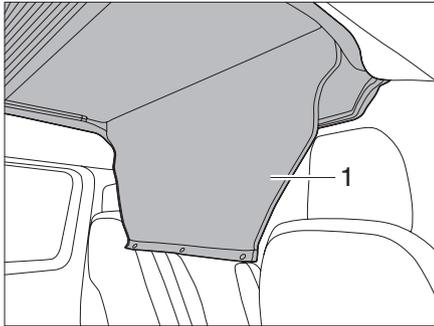


Fig. 41 Unroll the access cover

- ▶ Pull down the bed (Fig. 36,1) by the strap (Fig. 36,2).

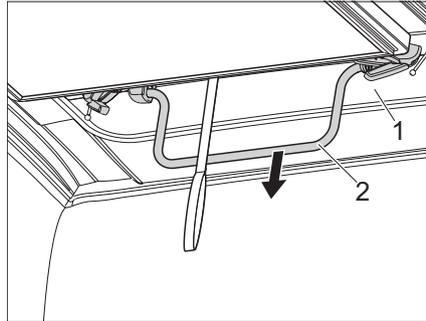


Fig. 42 Pulling the pop-up roof downwards

- ▶ Looking towards the back, pull the pop-up roof (Fig. 42,1) by the bar (Fig. 42,2) **slowly** downwards and observe whether the cloth bellows drops cleanly inwards.

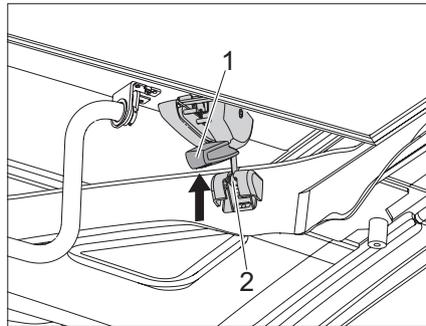


Fig. 43 Tensioning the locking mechanisms

- ▶ Push the pin (Fig. 43,2) into the holder.

- ▶ Push up the locks (Fig. 43,1) on the left and right.
- ▶ Check that there is no play in the pin (Fig. 43,2).

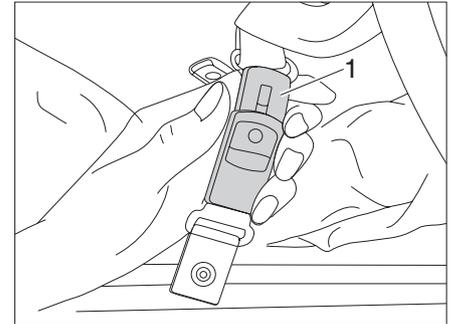


Fig. 44 Closing the securing belt

- ▶ Close the securing belts (Fig. 44,1).
- ▶ Carefully roll up the cloth bellows near the lock and fix it with three Velcro fasteners (Fig. 32,1).
- ▶ Close the access cover (Fig. 41,1) with the press-studs.

## 8.8 Storage box (optional)

### 8.8.1 Removing and installing the storage box (optional)



► Do not use the storage box as a seat while driving!



Fig. 45 No seat

The storage box is fitted behind the driver's seat.



The storage box is an item of special equipment.

### Fit the storage box

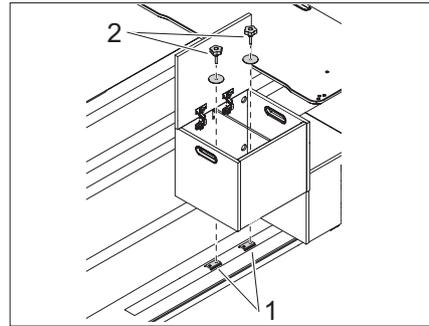


Fig. 46 Fit the storage box



The storage box can also be fitted rotated through 180°.

- Place the storage box over the threaded plates (Fig. 46,1) in the rail.
- Guide the star screws (Fig. 46,2) with washers through the storage box and screw them into the threaded plates (Fig. 46,1).
- Check that the storage box is secure.

### Remove the partition of the storage box

The partition can be removed, for example, to stow larger objects.

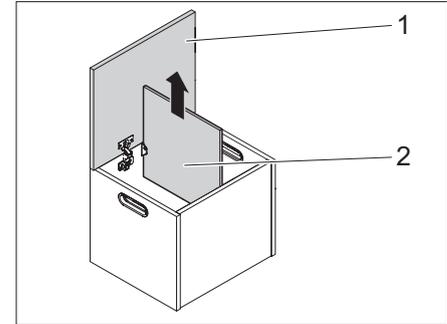


Fig. 47 Remove the lid

- Undo the hinges of the lid (Fig. 47,1) and remove the lid upwards.
- Pull the partition (Fig. 47,2) out of the storage box.

### Using the storage boxes as a bench outdoors

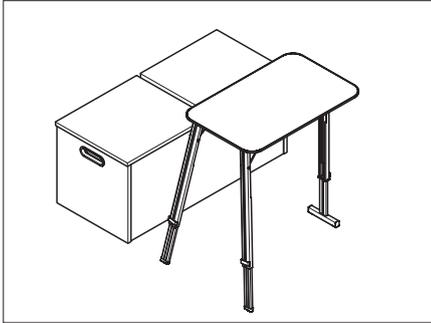


Fig. 48 Storage boxes as a bench

The storage box can also be used as seating furniture in conjunction with a table.

## 8.9 Table



The table must not remain in assembled position in during the journey.  
 ► Store and secure the table in the tray provided before starting the journey.



Fig. 49 Do not leave the table in assembled position during the journey

The table can be placed outside or inside Dethleffs Globevan.

### Set up a table inside the vehicle



The table must be firmly connected to the vehicle during use and must be locked to the rail accordingly.

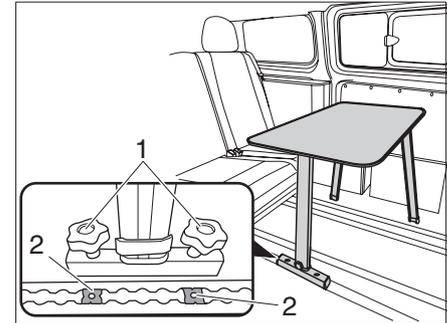


Fig. 50 Table in assembled position

- Place the table foot using the slot nuts (Fig. 50/2).
- Screw 2 toggle screws (Fig. 50/1) into the slot nuts (Fig. 50/1).

### Stowing the table

The table is stowed in a recess on the right-hand side of the vehicle.

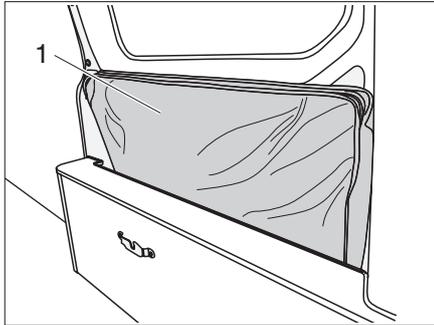


Fig. 51 Table stowed

- ▶ Stow the table (Fig. 51,1) in the storage bag.
- ▶ Place the storage bag in the recess on the right-hand side of the vehicle.
- ▶ Secure storage bag with straps.

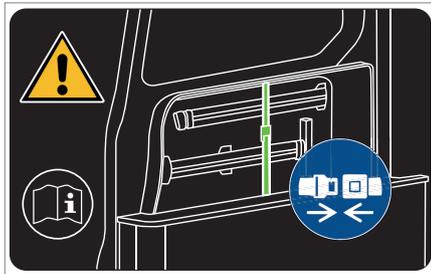


Fig. 52 Secure table with straps

### 8.10 Roof rail

On the Dethleffs Globevan there is a roof rail (Fig. 53,1) into which it is possible to draw in an awning or a special sun sail.



- Only open and close the awning when the sliding door and passenger door are closed.
- Failure to do so may result in damage to the doors.

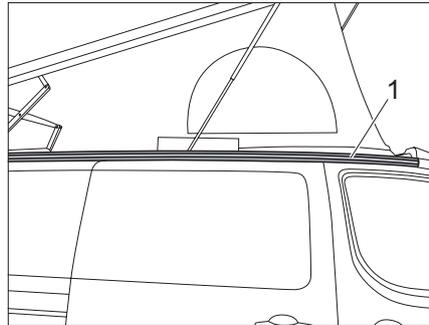


Fig. 53 Roof rail



An optional awning that can be retrofitted to the vehicle is available through Custom Parts. For professional installation, we recommend that this work be carried out by an appropriate workshop.

### 8.11 Luggage net

A luggage net (Fig. 54,1) can be attached to the LED light strips under the bed.



- Only fabric items may be kept in the luggage net.
- The maximum load is 2 kg.
- During the journey, no objects may be in the nets. In the event of non-compliance, Dethleffs GmbH & Co KG accepts no liability.

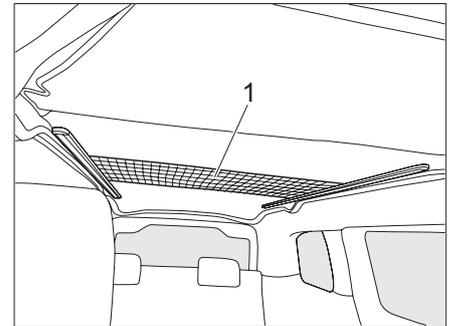


Fig. 54 Luggage net

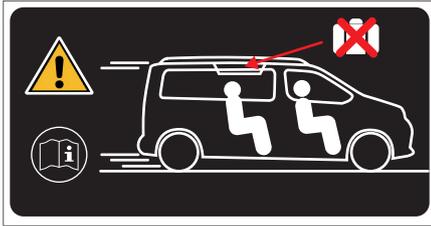


Fig. 55 No luggage in the luggage net during the journey

## 8.12 Textile roof cupboard (optional)

The textile roof cupboard (optional) (Fig. 56) is fixed in the rear under the tailgate.



- Only textile items may be kept in the textile roof cupboard.
- The maximum load is 10 kg.

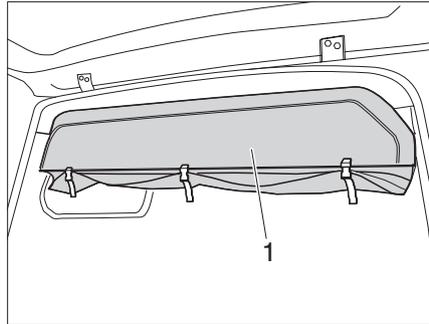


Fig. 56 Textile roof cupboard (optional)

The textile roof cupboard (optional) is fitted to the roof with 4 screws and to the vehicle frame with the suspension device (Fig. 57,1). The suspension device is pre-assembled as standard.

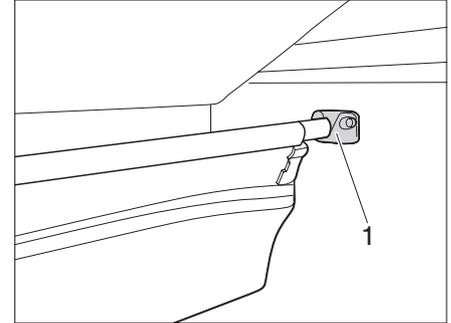


Fig. 57 Suspension device for textile roof cupboard

## 9 Gas system

### 9.1 Basic safety instructions

#### 9.1.1 Preventative measures



- Close the gas isolator tap and the regulator tap before commencing the journey and when leaving the vehicle.
- When refuelling, on ferries or in the garage, no appliances (e.g. heater or cooker) may be in operation if operated via the built-in burner. Danger of explosion!
- If an appliance is operated through a burner, do not start the appliance up in closed areas (e.g. garages). Danger of poisoning and suffocation!
- Have the gas system serviced, repaired or altered by an authorised workshop only.
- Open the pop-up roof or a window before using open burners (gas cooker).
- Do not use the gas cooker for heating purposes.
- If the vehicle or gas device are not used, close the regulator tap on the gas bottle.



- Ignition safety valves must close within 1 minute after the gas flame has extinguished. A clicking sound is audible. Check function from time to time.
- The installed gas appliance is designed for use solely with propane or butane gas or a mixture of both. The gas pressure regulator and the built-in gas appliance are designed for an operating pressure of 30 mbar.
- Propane gas is capable of gasification up to -42 °C, whereas butane gas gasifies at 0 °C. Below these temperatures no gas pressure is available.
- Butane gas is unsuitable for use in winter.
- Only connect gas-operated devices (e.g. gas grill) which have been designed for a gas pressure of 30 mbar.
- Exhaust fumes must be able to escape into the atmosphere unhindered and fresh air must be able to enter unhindered.
- ▶ Keep the suction openings clean and clear (e.g. from snow and ice). No snow walls or aprons may be allowed to lie against the vehicle.



- Due to its function and construction, the gas bottle compartment is a space which is open to the exterior. Never cover or block the standard forced ventilation. Otherwise leaking gas cannot be dispersed to the outside.
- The regulator tap on the gas bottle must be accessible.

#### 9.1.2 Checks



- Have the gas system checked by an authorised specialist workshop before starting up and according to the national regulations. This also applies for not registered vehicles. For modifications to the gas system have the gas system immediately checked by an authorised specialist workshop.
- The gas pressure regulator must also be checked. The gas pressure regulator has to be replaced at least every 10 years. The vehicle owner is responsible for seeing that this is carried out.



- Regularly inspect the gas tube fitted to the gas bottle connection for tightness. The gas tube must not have any tears and must not be porous. Have the gas tube replaced in an authorised workshop no later than 10 years after the manufacturing date. The operator of the gas system must see to it that the parts are replaced.

### 9.1.3 What to do in the event of danger



- In case of a defect of the gas system (gas odour, high gas consumption) there is danger of explosion!
  - ▶ Close the regulator tap on the gas bottle immediately.
  - ▶ Open doors and windows and ventilate well.
  - ▶ Do not smoke; do not ignite any open flames, and do not operate electric switches (light switches etc.).
- Have a defect in the gas system repaired by an authorised specialist workshop.

## 9.2 Gas bottle



- ▶ Gas bottles is only to be transported within the designated gas bottle compartment.
- ▶ Place gas bottle vertically in the gas bottle compartment.
- ▶ Always fit the protective cap when the gas bottle is not connected to the gas tube.
- ▶ Close the regulator tap on the gas bottle before the gas pressure regulator or gas tube are removed from the gas bottle.
- ▶ Use your hands only to connect the gas pressure regulator or the gas tube to the gas bottle. Do not use any tools.
- Only use special gas pressure regulators (Fig. 58,4) with a safety valve for use in vehicles (included with new vehicles). Other gas pressure regulators are not allowed.
- Only use gas bottles up to 1.8 kg, including gas bottle valve with a safety device (e.g. blue 1.8 kg CAMPINGAZ bottles R904\*).
- Never block the ventilation opening in the floor under the gas bottle



- Connections on the gas pressure regulator have left-handed threads.
- For gas-operated units the gas pressure must be reduced to 30 mbar.
- Connect gas pressure regulator complete with safety valve directly to bottle valve.
- The gas pressure regulator reduces the gas pressure in the gas bottle down to the operating pressure of the gas device.
- Information is available from trading partners or the service centre.

\* A gas bottle valve with safety device is not part of the camping gas bottle.

## 9.3 Establishing the gas connection



► Have the gas connection established by an expert only.

The gas connection must be established as follows when the Dethleffs Globevan is used for the first time:

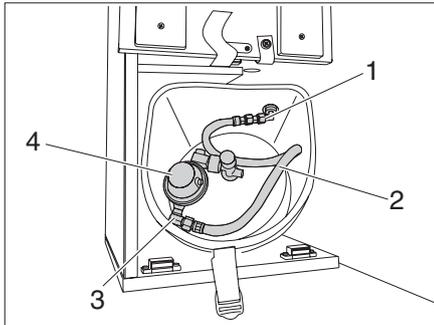


Fig. 58 Gas tube with gas pressure regulator

- Screw the elbow (Fig. 58,3) onto the gas tube (Fig. 58,2).
- Screw the gas pressure regulator (Fig. 58,4) onto the elbow.
- Screw the gas tube (Fig. 58,2) with the gas pressure regulator onto the connecting piece (Fig. 58,1).
- Connect the gas bottle (see chapter 9.4).

## 9.4 Changing gas bottles



- ▶ When changing gas bottle, do not smoke or light any open flames.
- ▶ When you have changed the gas bottle, check whether gas escapes at the connection points and unions. Use a leakage search spray to spray the relevant connection point or union. These agents are available at the accessories shop.
- ▶ Check the ventilation opening on the bottom of the gas bottle compartment for dirt, and clean if necessary.

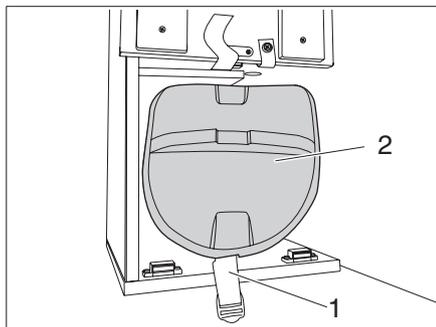


Fig. 59 Gas bottle compartment

- ▶ Open the lid of the gas bottle compartment.
- ▶ Undo the fixing belt (Fig. 59,1).
- ▶ Remove cover (Fig. 59,2).

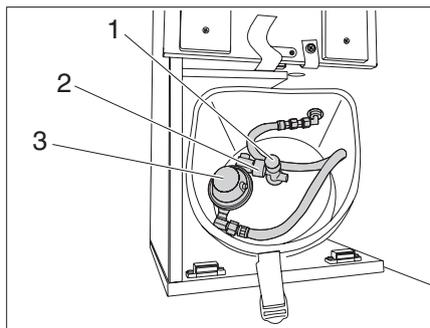


Fig. 60 Gas bottle connection

- ▶ Close the regulator tap (Fig. 60,1) on the gas bottle. Pay attention to the direction of the arrow.
- ▶ Hold the gas pressure regulator (Fig. 60,3) and open the knurled nut (Fig. 60,2) (left-handed thread).
- ▶ Remove the gas pressure regulator and the gas tube from the gas bottle.

- ▶ Remove the gas bottle.
- ▶ Place a filled gas bottle in the gas bottle compartment.
- ▶ Position the gas pressure regulator (Fig. 60,3) and the gas tube on the gas bottle and tighten the knurled nut (Fig. 60,2) by hand (left-handed thread).
- ▶ Close the cover (Fig. 59,2) and secure it with a fixing belt (Fig. 59,1).
- ▶ Close the gas bottle compartment lid.

## 9.5 Gas isolator tap

The gas shut-off valve (Fig. 61,1) for the cooker is located in the vehicle behind the gas bottle compartment under the compartment lid.

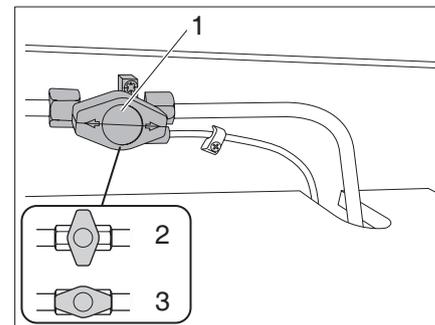


Fig. 61 Gas isolator tap

- 1 Gas isolator tap
- 2 - closed
- 3 - open

## 10 Electrical system

### 10.1 General safety instructions



- Only allow qualified personnel to work on the electrical system.
- All electronic devices (e.g. mobile telephones, radios, televisions or DVD players) which have been retrofitted to the vehicle and are operated during the journey must have specific features: These are the CE certification, the EMC test (electromagnetic compatibility) and the "E1" inspection.
- Only in this way can the functional reliability of the vehicle be ensured. Otherwise the airbag may be triggered or interference to the on-board electronics may result.

The vehicle is a safe place during a storm (Faraday cage).

- ▶ To protect the electrical devices, disconnect the 230 V connection and retract the antennae as a precaution.

### 10.2 12 V power supply



- To disconnect all electrical 12 V appliances from the power supply, disconnect the living area battery from the 12 V power supply.
  - ▶ Press the switch on the transformer/rectifier.

When the vehicle is not connected to the 230 V power supply or the 230 V power supply is switched off, the living area battery supplies the living area with 12VDC.

The living area battery has a limited power supply only. For this reason, electrical appliances such as the lights should not be operated for a long time without using the 230 V power supply. The 12 V power supply can be cut off with the 12 V main switch on the panel. The heater remains ready for operation.

When the vehicle engine is running, the vehicle alternator recharges the living area battery and the starter battery.

#### **Compressor icebox (special equipment)**

The icebox is operated with 12 V only.

### 10.2.1 Living area battery



- Prior to commencing a journey ensure the living area battery is fully charged. For this reason charge the battery for at least 20 hours before commencing the journey.
- During the trip, use every opportunity to charge the living area battery.
- Charge the living area battery for at least 20 hours after the journey.
- Before a temporary lay-up charge the battery for at least 20 hours.
- Longer total discharge damages the battery irreparably.
- Use only the installed transformer/rectifier to charge the living area battery.
- Irreparable damage to the living area battery will result if it is overcharged.
- For long periods of inactivity (4 weeks or more), either disconnect the living area battery from the 12 V power supply or recharge it regularly.
- Do not smoke in the vicinity of the living area battery.

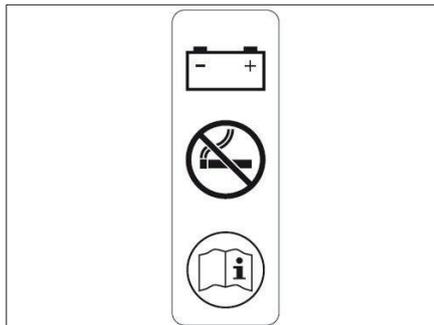


Fig. 62 Do not smoke in the vicinity of the living area battery



The battery is maintenance-free. Maintenance-free means:

- It is not necessary to check the acid level.
- It is not necessary to lubricate the battery poles.
- It is not necessary to refill the distilled water.

Even a maintenance-free battery must be charged regularly.

The charging condition of the living area battery can be checked on the panel.

### Location

The living area battery is installed in the storage space behind the gas bottle compartment on the left.

### Charging using a 230 V power supply

If the vehicle is connected to the 230 V power supply, the living area battery and the starter battery are automatically charged by the charger module on the transformer/rectifier. The starter battery is charged with a float charge of 2 A. The charging current is adapted to suit the charging condition of the battery. This ensures that it is not possible to overload the battery. To make use of the maximum output from the charger module on the transformer/rectifier, switch off all electrical appliances during charging.

### Charging using the vehicle engine

When the vehicle engine is running, the vehicle alternator recharges the living area battery and the starter battery.

When the vehicle engine is switched off, the batteries are automatically disconnected from one another by a relay in the transformer/rectifier. This prevents the starter battery from being run down by electrical appliances in the living area. The starting capability of the vehicle is thus preserved. The charging condition of the living area battery can be read off on the panel.

### Changing the living area battery



- When the living area battery is changed, only use batteries of the same type.
- Do not connect the battery cables to the wrong poles.



- When changing the living area battery, use only batteries which meet the minimum capacity of the charger. Observe the separate instruction manual for the charger. Lower-capacity batteries will generate a great deal of heat when they are charged. Danger of explosion!
  - Do not use the ignition when the starter battery or the living area battery is disconnected. Danger of short circuit!
  - Before disconnecting or connecting the terminals of the battery, switch off the vehicle engine, the 230 V and 12 V power supplies as well as all the appliances. Danger of short circuit!
  - Do not smoke when changing the living area battery.
  - Have the living area battery changed by an authorised specialist workshop.
- ▶ Switch off the vehicle engine.
  - ▶ Switch off the 12 V main switch on the panel. The indicator lamp goes out.
  - ▶ Switch the battery cut-off switch on the transformer/rectifier to "Batterie Aus" ("battery Off").
  - ▶ Disconnect the mains plug from the transformer/rectifier.
  - ▶ Switch off all gas consumers, close the gas shut-off valve and the main shut-off valve on the gas bottle.



There is a danger of short circuit when disconnecting the battery poles.

► For this reason, first disconnect the negative pole on the living area battery and then the positive.

- Remove the living area battery from the vehicle.
- Install the new living area battery in reverse order.

### 10.3 Transformer/rectifier (EBL 119)



Do not cover the ventilation slots.  
Danger of overheating!



- Depending on the model, not all fuse slots are fitted with fuses.
- Further information can be obtained in the manufacturer's instruction manual.

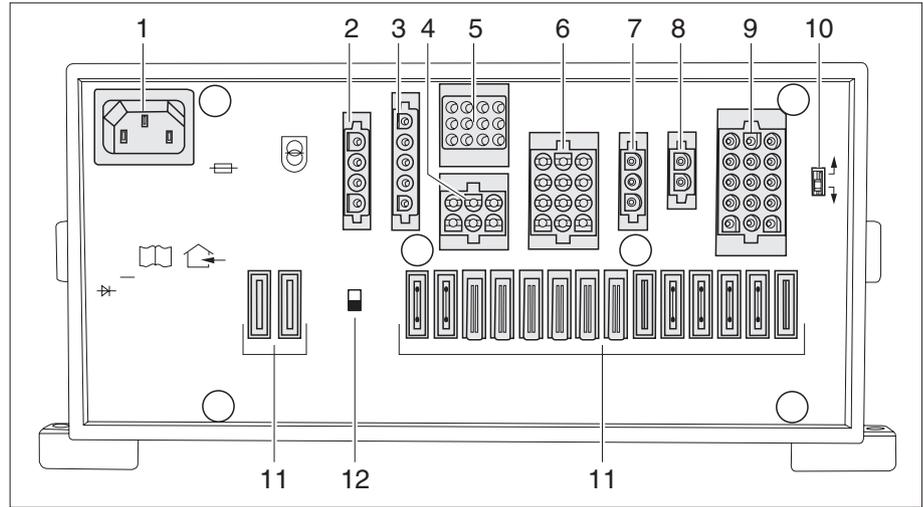


Fig. 63 Transformer/rectifier (EBL 119)

- |   |   |
|---|---|
| <p>1 Main supply socket 230 V~</p> <p>2 Output: Block 1 - refrigerator</p> <p>3 Input: Block 2 - Control lines, alternator D+</p> <p>4 Output: Block 4 - heater, safety/drainage valve, basic light (lighting in the entrance area), entrance step</p> <p>5 Output: Block 3 - Panel</p> <p>6 Output: Block 5 - Display of solar cell at on-board control (if fitted), spare 2, spare 3, spare 4</p> | <p>7 Output: Block 6 - Solar charge regulator (if fitted)</p> <p>8 Output: Block 7 - Auxiliary charging unit</p> <p>9 Output: Block 8 - Consumer circuit 1, consumer circuit 2, TV, water pump, spare 1, spare 5, spare 6</p> <p>10 Battery selector switch (lead-acid/lead-gel/AGM)</p> <p>11 Fuses (for the assignment, see chapter 10.6.2)</p> <p>12 Battery cut-off switch (battery On/Off)</p> |
|---|---|

## Functions

The transformer/rectifier has the following functions:

- The transformer/rectifier charges the living area battery. The transformer/rectifier charges the starter battery with a float charge only.
- The transformer/rectifier monitors the voltage in the living area battery.
- The transformer/rectifier distributes the current to the 12 V circuits and secures them. Devices with a maximum of 10 A can be connected to the sockets.
- The transformer/rectifier contains connections for a solar charge regulator, an auxiliary charging unit as well as other control and monitoring functions.
- When the engine is turned off, the transformer/rectifier separates the starter battery electrically from the living area battery. This prevents the 12 V living area appliances from discharging the starter battery.

The transformer/rectifier only works in conjunction with a panel.

When the transformer/rectifier is subject to a heavy load, the fitted charger module reduces the charging current. This protects the charging device against overheating. The transformer/rectifier is subject to a heavy load when e.g. an empty living area battery is charged, additional electrical appliances are turned on and the ambient temperatures are high.

## Location

The electrical block is located in the rear cupboard base on the left-hand side.

### 10.3.1 Battery cut-off switch



- The battery cut-off switch disconnects all the appliances that are connected to the transformer/rectifier from the 12 V network.
- After the battery cut-off switch has been switched back on:
  - ▶ Put the heater back into operation (depending on the model). To do so, switch the 12 V main switch briefly back on. This also applies if the living area battery was disconnected and then reconnected.

The battery cut-off switch (Fig. 63,12) disconnects all the living area 12 V appliances, even the safety/drainage valve. This prevents the living area battery from slowly discharging if the vehicle is not used for a longer period of time (e.g. temporary lay-up).

The batteries can still be charged by the transformer/rectifier even when the battery cut-off switch is switched off.

#### Switching the battery on/off

- ▶ Push up the battery cut-off switch (Fig. 63,12): Battery On.
- ▶ Push down the battery cut-off switch (Fig. 63,12): Battery Off.

### 10.3.2 Battery selector switch



If the battery selector switch is set incorrectly, oxyhydrogen gas (exploding gas) can form. Danger of explosion!



Incorrect setting of the battery selector switch damages the living area battery.

- ▶ Do not change the factory setting of the battery selector switch.

At the battery selector switch (Fig. 63,10), the charger module in the transformer/rectifier can be set to the type of living area battery installed in the vehicle ("lead-gel", "lead-acid" or AGM).

### 10.3.3 Battery monitoring



Completely recharge a discharged living area battery as soon as possible.

The battery monitoring in the transformer/rectifier monitors the voltage in the living area battery.

If the battery voltage falls below 10.5 V, the battery monitoring in the transformer/rectifier switches off all 12 V consumers.

#### Measures

- ▶ Switch off all the electrical appliances that are not essential at the corresponding switch.
- ▶ If necessary, use the 12 V main switch to switch the 12 V power supply back on briefly. This is only possible, however, when the battery voltage is above 11 V. If the voltage is below this level, the 12 V power supply cannot be switched on again until the living area battery has been recharged.

### 10.3.4 Charging the battery

When the vehicle engine is running, the vehicle alternator recharges the living area battery and the starter battery. The main charge is provided to the starter battery. The living area battery cannot be charged completely during the journey.

When the vehicle engine is switched off, the batteries are automatically disconnected from one another by a relay in the transformer/rectifier. This prevents the starter battery from being run down by electrical appliances in the living area. The starting capability of the vehicle is thus preserved. The charging condition of the living area battery can be read off on the panel. If the vehicle is connected to the 230 V power supply, the living area battery and the starter battery are automatically charged by the charger module on the transformer/rectifier. The starter battery is only charged with a float charge. The charging current is adapted to suit the charging condition of the battery. This ensures that it is not possible to overload the battery.

- ▶ To make use of the maximum output from the charger module on the transformer/rectifier, switch off all electrical appliances during charging.

### 10.4 Panel LT 104

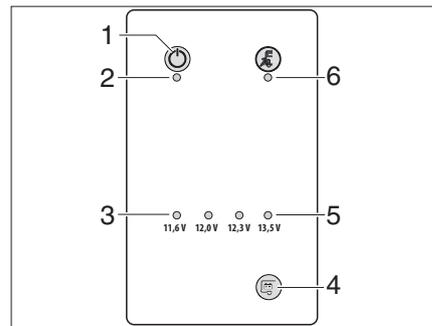


Fig. 64 Panel LT 104

- 1 Main switch 12 V ON/OFF
- 2 12 V indicator lamp (green) at switched-on system
- 3 Warning LED total discharge
- 4 Check battery voltage of living area battery
- 5 Indicator LEDs (green-green-yellow-red). Display of the battery voltage in four steps with voltage specification and warning against total discharge
- 6 230 V indicator lamp lights up at connected network (yellow)

### 10.4.1 Check battery voltage

The sensor touch pad (Fig. 64,4) enables the battery voltage of the living area battery to be displayed.

The indicator LEDs (Fig. 64,5) show the battery voltage.

#### Displays

- Red warning LED (Fig. 64,3) lights up:  
Battery voltage over 11.6 V
- Red and yellow LEDs light up:  
Battery voltage over 12.0 V
- Red, yellow and the bottom green LEDs light up:  
Battery voltage over 12.3 V
- All LEDs light up:  
Battery voltage over 13.5 V

### 10.4.2 Battery alarm for the living area battery

The red warning LED (Fig. 64,3) flashes as soon as the voltage of the living area battery only still amounts to 11V (measured under operation) and there is a risk of a total discharge.



- ▶ When the battery alarm comes on, switch off the appliances and charge the living area battery, either by mobile operation or by connection to a 230 V power supply. Total discharge damages the battery.



If the battery voltage falls below 10.5 V, the battery monitoring in the transformer/rectifier switches off all 12 V consumers.

### 10.4.3 12 V main switch

The 12 V main switch (Fig. 64,1) switches the panel and the 12 V power supply of the living area on and off.

Exception: Depending on the model, the heater and Reserve 4 remain ready for operation.

#### Switching on

- ▶ Touch the sensor touchpad (Fig. 64,1). The 12 V living area power supply is switched on. The 12 V indicator lamp (Fig. 64,2) lights up in green.

#### Switching off

- ▶ Press the sensor touch pad (Fig. 64,1) again. The 12 V living area power supply is switched off. The 12 V indicator lamp (Fig. 64,2) goes off.



- ▶ When leaving the vehicle switch off the 12 V main switch. This prevents unnecessary discharging of the living area battery.

Appliances such as the charger, solar charge regulator and panel consume approx. 20 mA to 65 mA of electricity from the battery capacity, even when the 12 V main switch is turned off. Therefore disconnect the living area battery from the 12 V power supply, if the vehicle will not be used for a long period of time.

#### 12 V indicator lamp

The 12 V indicator lamp (Fig. 64,5) illuminates whenever the 12 V main switch (Fig. 64,6) is switched on.

#### 230 V indicator lamp

The yellow 230 V indicator lamp (Fig. 64,1) lights up whenever line voltage is available at the transformer/rectifier input.

## 10.5 230 V power supply



Only allow qualified personnel to work on the electrical system.

The 230 V on-board power supply supplies the following components:

- sockets with earth contact for appliances with maximum 10 A
- transformer/rectifier

The electrical appliances connected to the 12 V power supply of the living area are supplied with voltage by the living area battery.

Connect the vehicle to an external 230 V power supply system as often as possible. The charger module in the transformer/rectifier automatically charges the living area battery. In addition to this, the starter battery is charged with a float charge of 2 A.

### 10.5.1 230 V connection



The external 230 V supply is protected by a residual current circuit breaker (30 mA).

- ▶ Completely unwind the cable on cable drums to prevent overheating.



For the connection points on camp sites (camping distributors) highly sensitive fault current protection switches (FI-switches, 30 mA) are obligatory.

The vehicle can be connected to an external 230 V power supply. The cable may have a length of maximum 25 m. Depending on the model, the flap for the 230 V connection is identified with the symbol "⚡".

#### Connecting the power cable

- ▶ Open the external flap.
- ▶ Depending on the model, fold up the cover.
- ▶ Plug in the plug.



- ▶ Depending on the model, unlock the plug before pulling it out.

## 10.6 Fuses



- Only replace defective fuses when the cause of the defect is known and has been remedied.
- Only replace defective fuses when the power supply is switched off.
- Never bridge or repair fuses.

### 10.6.1 Main fuses 12 V

#### Location

The main 12 V fuses (Fig. 65,1) are located behind the driver's seat in the leg room.

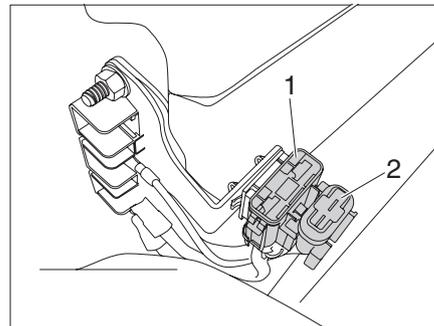


Fig. 65 Main fuse

- 1 Main fuse 40 A/orange
- 2 Fuse 5 A; for maintenance charging of the starter battery with 230 V connection

## 10.6.2 12 V fuses

The appliances connected to the 12 V power supply in the living area are fused individually. The fuses are accessible at different positions in the vehicle.

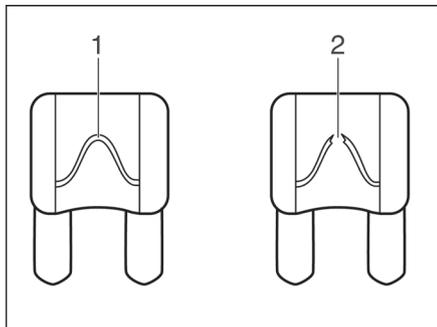


Fig. 66 12 V fuse

- 1 Unbroken fuse element
- 2 Broken fuse element

An intact 12 V fuse can be detected by the unbroken fuse element (Fig. 66,1). If the fuse element is broken (Fig. 66,2), change the fuse.



Replace fuses only when they are disconnected from the power supply!

Before changing fuses, take the function, value and colour of the relevant fuses from the following specifications.

When changing fuses, only use flat fuses with the values shown below.

### Fuses for the living area battery

The 12 V fuses are located in the battery box on the left side of the vehicle.

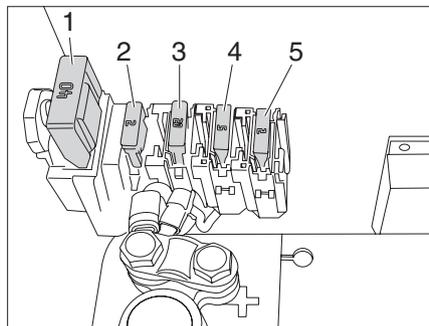


Fig. 67 Fuses in the battery box

- 1 Jumbo flat fuse 40 A (load fuse EBL 119)
- 2 Fuse 2 A for control voltage from EBL 119
- 3 Fuse 20 A for load fuse independent vehicle heater special equipment
- 4 Fuse for control line, independent vehicle heater special equipment
  - 1 A (Webasto)
  - 5 A (Eberspächer)
- 5 Fuse 2 A or K15 (SIG IN) D+ Generator

**Fuses at the transformer/rectifier EBL 119 (Fig. 63,11)**

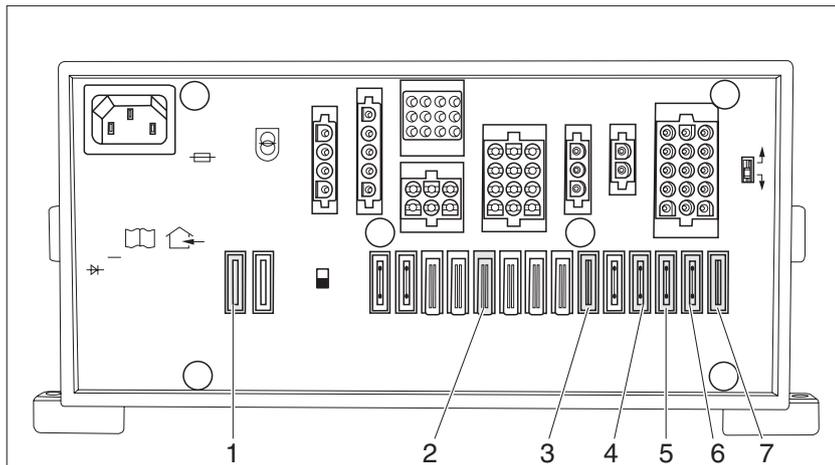


Fig. 68 Fuse assignment EBL 119

Pos.	Function	Value/ colour
1	Internal charger for charging the battery	20 A yellow
2	Reserve 2 – 12 V socket for icebox between the two front seats	15 A blue
3	Reserve 6 – 12 V socket, side wall rear left	15 A blue
4	Circuit 1 – LED lighting strips under the bed	10 A red
5	Circuit 2 – gooseneck lamp (special equipment)	10 A red
6	TV – USB port, side wall rear left	10 A red
7	Pump – cooker's piezo lighter	5 A beige

### 10.6.3 230 V fuse



The 230 V circuit breaker is located under an access flap on the left side of the vehicle behind the connections.

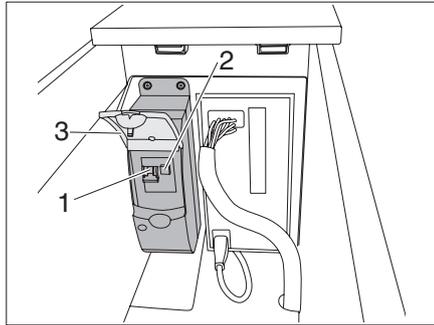


Fig. 69 230 V automatic circuit breaker

► Open the cover flap (Fig. 69,3).

The 230 V connection is protected by a two-pole automatic circuit breaker (Fig. 69,1).



- The residual current circuit breaker (Fig. 69,2) for 230 volts should be tripped once annually so that the mechanism does not "stick" and the tripping time is not extended.

# 11 Appliances

## 11.1 General



For safety reasons, spare parts for pieces of heating appliances must correspond with manufacturer's instructions and be permitted by the manufacturer as a spare part. These spare parts may only be fitted by the manufacturer or an authorised specialist workshop.



Further information can be obtained in the instruction manual for the respective appliance.

Depending on the version, the built-in heating, cooker and icebox are built into the vehicle. In this instruction manual a description is given only for the operation of the appliances and their particular features.

- ▶ Before starting up a gas-powered built-in appliance, open the main shut-off valve on the gas bottle and the gas shut-off valve (Fig. 70,1).

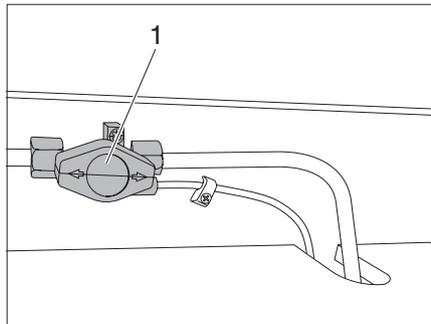


Fig. 70 Cooker's gas shut-off valve

## 11.2 Diesel independent vehicle heater (special equipment)

The Dethleffs Globevan is optionally equipped with a diesel independent vehicle heater.



**Risk of burns!**  
Hot air with a temperature of 80-120 °C can flow from the outlet of the vehicle heater.  
▶ Do not cover the outlet (Fig. 71,1) or point it directly at objects or parts of the body.



- New heaters might give off a slight odour when they are used for the first time.
- In the case of continuous operation at low output levels, we recommend that the heater be operated at full load for 15 minutes once a month in order to burn any deposits in the burner.
- Heating the interior while driving is possible and permitted.
- Further information can be obtained in the manufacturer's instruction manual.

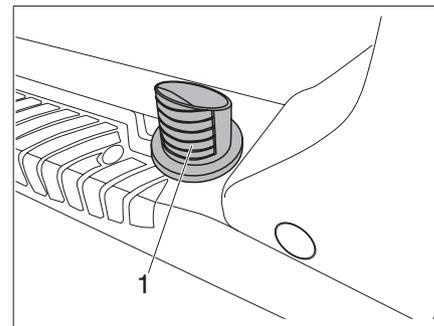


Fig. 71 Outlet of the vehicle heater

## 11.3 Diesel independent vehicle heater operating panel



Further information can be obtained in the manufacturer's instruction manual.

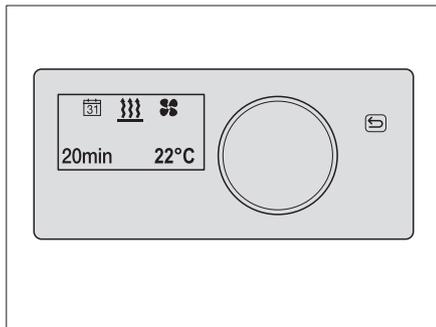


Fig. 72 Operating panel



Your built-in operating panel can differ from this illustration. Refer to the supplied instruction manual.

The independent vehicle heater is controlled with the operating panel. The following functions are available:

- Heating
- Ventilation (circulating air only, no fresh air)



The ventilation function only activates the fan, the heating function is always switched off.

There are several fan speeds to choose from. They differ in the power of the air flow that moves the circulating air inside the Dethleffs Globevan.

## 11.4 Gas cooker



- Never let gas escape unburned due to danger of explosion.
- Before using the cooker make sure that there is sufficient ventilation. Open a window or the pop-up roof.
- Do not use the gas cooker for heating.
- Always protect your hands with cooking gloves or potholders when handling hot pots, pans and similar items. There is a risk of injury!



- The process of ignition must be visible from above and must not be covered by cooking pans placed on the cooker.
- During switching-on and when the gas cooker is in operation, there must be no flammable or easily combustible objects such as tea towels, serviettes, cushions etc. in the vicinity of the gas cooker. Fire hazard!
- The gas cooker's flames must always be covered with saucepans or pans. Never use the gas cooker without saucepans or pans.



- Use only pots and pans whose diameter is suitable for the burner grates of the gas cooker.
- When the flame fades, the thermocouple automatically cuts the gas supply.
- Further information can be obtained from the separate instruction manual "Gas cooker".

The vehicle is equipped with a 1-flame gas cooker in the rear.

### Assembling the gas cooker

- ▶ Open the main shut-off valve (Fig. 60,1) on the gas bottle and the gas shut-off valve (Fig. 61,1).
- ▶ Move the pull-out gas cooker latch upwards (Fig. 73,1).

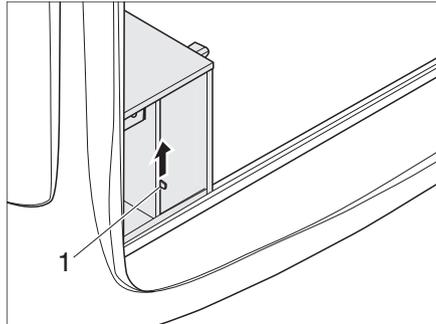


Fig. 73 Pull-out gas cooker latch

- ▶ Pull out the pull-out gas cooker (Fig. 74,1) until the latch engages.

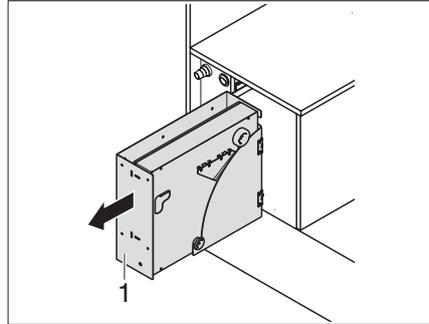


Fig. 74 Extending the pull-out gas cooker

- ▶ Swivel the side panel (Fig. 75,1).

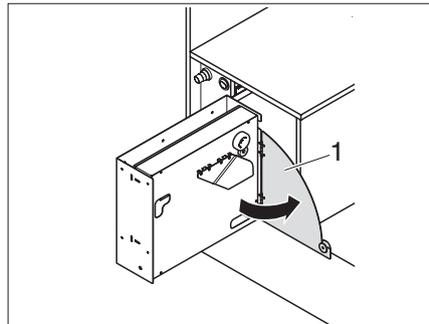


Fig. 75 Swivelling the side panel

- ▶ Fold out the support plate (Fig. 76,1) and swivel the gas cooker (Fig. 76,2) downward.

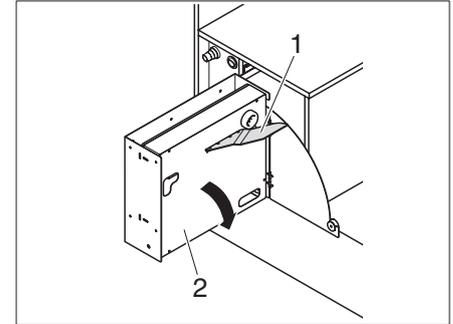


Fig. 76 Folding down the gas cooker

- ▶ Turn the control knob (Fig. 77,1) to the ignition position (large flame).
- ▶ Press the control knob (Fig. 77,1) down and hold it.

The automatic spark ignition ignites.

- ▶ When the flame burns, hold the control knob (Fig. 77,1) down for 10 to 15 seconds, until the thermocouple keeps the gas supply automatically open.
- ▶ Release the control knob and turn to the desired setting.
- ▶ Repeat the procedure if the flame does not burn.

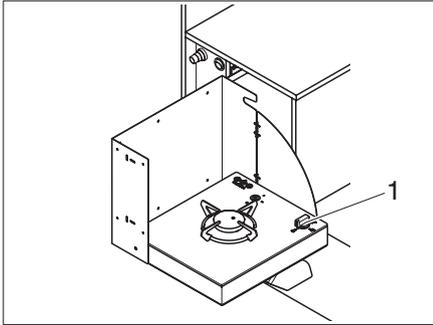


Fig. 77 Control knob

### Stowing the gas cooker



Do not push the gas cooker back in until it has cooled down. Fire hazard!

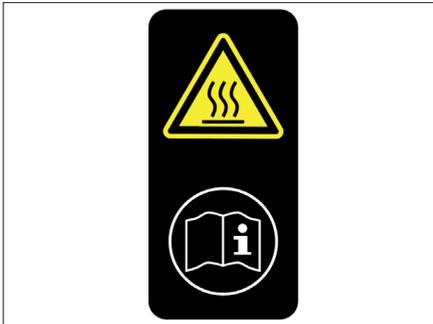


Fig. 78 Hot surfaces

- ▶ Turn the control knob (Fig. 77,1) to the 0-position. The flame fades.
- ▶ Close the gas shut-off valve (Fig. 61,1) and the main shut-off valve (Fig. 60,1) on the gas bottle.
- ▶ Fold up the gas cooker again in reverse order, and push it in.

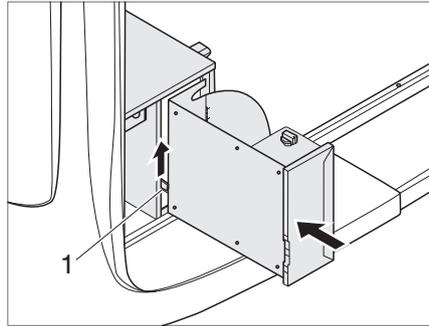


Fig. 79 Slide in the pull-out gas cooker

- ▶ Move the latch (Fig. 79,1) upwards and push in the pull-out gas cooker until the latch engages.

## 11.5 Icebox (special equipment)



The icebox must always be secured in the bracket during the journey.

The icebox (Fig. 80) is fitted behind the driver's seat instead of the storage boxes. It is operated via the 12 V on-board power supply.

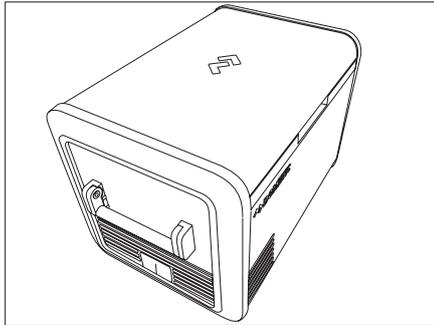


Fig. 80 Icebox (special equipment)



Your icebox may differ from this illustration.

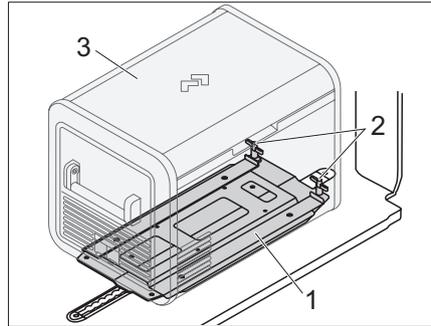


Fig. 81 Bracket (special equipment)

The bracket for the icebox is located behind the driver's seat.

- ▶ Place the icebox (Fig. 81,3) in the bracket (Fig. 81,1) .
- ▶ Attach the icebox with the toggles (Fig. 81,2) .

## 11.6 External shower (special equipment)

The connection for the external shower is on the left next to the pull-out of the gas cooker.

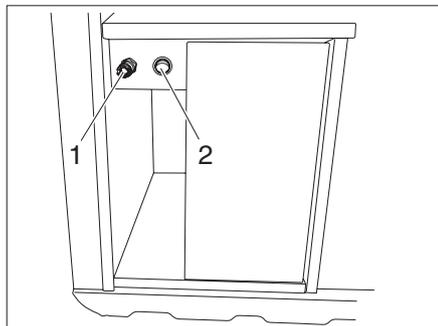


Fig. 82 Connection for external shower (special equipment)

- 1 Connection for external shower
- 2 On/off switch for external shower

The water tank (Fig. 84) for the external shower is located on the left side of the vehicle under the access flap in front of the gas cooker.

### Fill water tank for external shower



Do not fill the water tank for the external shower in the vehicle, but only outside the vehicle.

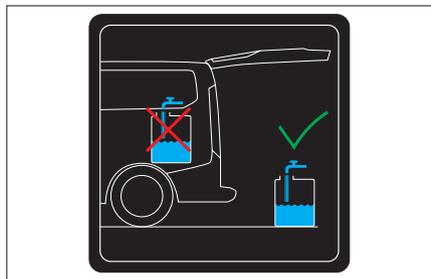


Fig. 83 Fill water tank for external shower

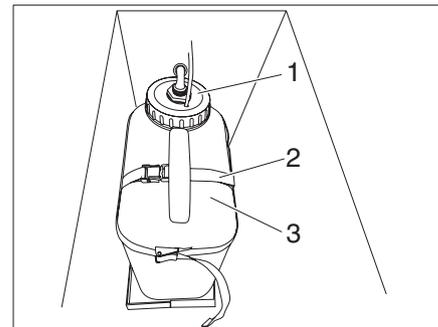


Fig. 84 Water tank for external shower

- ▶ Loosen the fastening straps (Fig. 84,2) .
- ▶ Unscrew cover (Fig. 84,1) and remove with submerged pump.
- ▶ Remove the water tank (Fig. 84,3) and fill it.
- ▶ Insert filled water tank, insert cover with submerged pump (Fig. 84,1) and screw tight.
- ▶ Secure water tank with fastening straps (Fig. 84,2) .
- ▶ Check that it is securely fastened.

## 12 Care

### 12.1 External care

#### 12.1.1 Washing with a high-pressure cleaner



- Do not clean the tyres with a high-pressure cleaner. The tyres might be damaged.
- Do not spray external applications (deco-films) directly with the high-pressure cleaner. The external applications could come off.
- Before cleaning the vehicle with a high-pressure cleaner, observe the operating instructions of the high-pressure cleaner.
- When cleaning with the nozzle for circular jet between the vehicle and the cleaning nozzle, maintain a minimum distance of approx. 700 mm.
- Take into consideration that the jet of water comes out of the cleaning nozzle with pressure. The vehicle may be damaged by incorrect handling of the high-pressure cleaner.
- The temperature of the water should not be above 60 °C.
- Keep the jet of water in constant movement during the washing process.
- Do not direct the water jet at clearances, built-in electrical parts, plugs, seals, ventilation grills or skylights.
- The vehicle may be damaged or water may enter the interior.

#### 12.1.2 Washing the vehicle



- Never have the vehicle cleaned in a car wash. Water can enter the forced ventilation openings. The vehicle could be damaged.
- ▶ Wash the vehicle only on a washing site intended for this purpose.
- ▶ Avoid full sunshine. Observe environmental measures.
- ▶ Clean external applications and attachments made of plastic only with plenty of warm water, a suitable cleaning agent and a soft cloth.
- ▶ Wash down the vehicle with plenty of water, a clean sponge or a soft brush. In the case of stubborn dirt add dish washing liquid to the water.
- ▶ Treat rubber seals of doors and storage flaps with talc.
- ▶ Treat locking cylinder of doors and storage flaps with graphite dust.

### 12.2 Interior care



- Treat stains immediately if possible.
- Synthetic parts in the living area are very delicate and should be treated with care. Do not use solvents, alcohol-containing cleaning agents or scourers containing sand. This procedure will help you to avoid brittleness and formation of cracks.
- Do not pour any corrosive agents into the drain holes. Never pour boiling water directly into the drain holes. Corrosive agents and boiling water cause damage to drainage pipes and siphon traps.
- Do not use vinegar based products to clean the water system, or for decalcification of the water system. Vinegar-based products may cause damage to seals or parts of the installation. Use standard decalcifying products for decalcification.
- Save water. Mop up all remaining water.



The service centres of our dealers will be glad to provide information about the use of maintenance products.

- Surface and knobs of furniture, lamps and synthetic parts in the living area should be cleaned with water and a wool cloth. A mild cleanser may be added to the water. If necessary, treat finished surfaces with furniture polish.
- Clean upholstery with dry foam specially manufactured for the use on upholstery or with the foam of a mild detergent. Do not wash upholstery. Protect upholstery from direct sunlight so that it does not lose its colour.
- Never clean the sink or the gas cooker with a scourer. Avoid anything which may cause scratching or grooves.
- Clean gas cooker only with a moist cloth. Prevent any water from penetrating the gas cooker. Water may damage the gas cooker.
- Unrolled seat belts can be cleaned with warm soapsuds. The seat belts must be completely dry before being rolled up.
- Clean the water canister with water and washing-up liquid, and then rinse with plenty of fresh water.

## 12.3 Care instructions for the pop-up roof



The following care instructions must be followed several times (but at least once) per year, depending on how often the pop-up roof is used.

- Treat the cloth bellows with a commercially available impregnation before the start of the season.
- Never close the cloth bellows when it is damp or wet. If this is nevertheless done, it must be completely dried as soon as possible.
- Rub the rubber seal on the roof shell with talc or a comparable product before the winter months so that the seal does not freeze to the body in the cold.
- Care for the roof in accordance with the vehicle manufacturer's paint care instructions. Commercially available paint care products can be used for this.
- Follow the care instructions of the SCA company.

## 12.4 Winter care



If there is any risk of frost, always run heater at a minimum of 15 °C. Set the circulation fan (if existing) to automatic mode. In the case of extreme external temperatures, the furniture flaps and doors should be left slightly open. The warm air flowing in can counteract the formation of condensation in the storage spaces.

### 12.4.1 Winter operation

During winter operation, condensation develops when the vehicle is occupied under low-temperature conditions. To ensure good interior air quality and avoid vehicle damage from condensation, sufficient ventilation is essential.

- When the vehicle is warming up, set the heater to the highest setting. This ensures optimal ventilation.
- In the morning, lift up all cushions, air out storage boxes and dry any damp areas.



If condensation has still developed, just wipe it off.

## 12.5 Laying up

### 12.5.1 Temporary lay-up



- After the vehicle has been standing for a longer period (approx. 10 months) have the braking and gas systems checked by an authorised specialist workshop.
- Take into consideration that water is undrinkable after only a short time.

Work through the checklist below before laying up:

#### Base vehicle

Activities	done
Completely fill fuel tank. This can prevent corrosion to the tank system	
Jack up the vehicle so that the wheels do not bear any load, or move the vehicle every 4 weeks. This prevents any pressure points from occurring on tyres and wheel bearings	
Protect the tyres from direct exposure to the sun. Danger of formation of cracks!	
Inflate tyres up to the recommended maximum pressure	
Always provide for sufficient ventilation in the underbody area. Humidity or lack of oxygen e.g. by covering with plastic film may cause optical irregularities to the underbody.	
Also observe the specifications in the operating instructions of the base vehicle	

#### Interior

Activities	done
Place upholstery in an upright position for ventilation, and cover	
Clean the icebox	
Leave the icebox lid slightly open	

#### Gas system

Activities	done
Close regulator tap on the gas bottle	
Close the gas shut-off valve	
Always remove gas bottle from the gas bottle compartment, even if it is empty	

#### Electrical system

Activities	done
Fully charge living area and starter battery <ul style="list-style-type: none"> <li>▶ Before a temporary lay-up charge the battery for at least 20 hours.</li> </ul>	
Disconnect the living area battery from the 12 V power supply	

## 12.5.2 Winter lay-up

The following additional measures are necessary for laying up over the winter:

### Base vehicle

Activities	done
Clean body and underbody thoroughly and spray with hot wax or protect with varnish	
Fill fuel tank with winter diesel	
Check the frost protection in the cooling water	
Repaint paint damage	

### Body

Activities	done
Keep the forced ventilation open	
Clean and grease all door and flap hinges	
Brush oil or glycerine on all locking mechanisms	
Rub all rubber seals with talc	
Use graphite dust to treat locking cylinders	

### Interior

Activities	done
Position de-humidifiers	
Remove upholstery from the vehicle and store in a dry place	
Air the interior every 3 weeks	
Empty all cupboards and storage compartments. Open lids, doors and drawers	
Thoroughly clean the interior	

### Electrical system

Activities	done
▶ Remove the starter battery and living area battery and store in a place protected from frost (see Chapter 10)	

### Complete vehicle

Activities	done
Arrange the tarpaulins in such a way that the ventilation openings are not covered, or use porous tarpaulins	

### 12.5.3 Starting up the vehicle after a temporary lay-up or after lay-up over winter

Work through the checklist below before starting up:

#### Base vehicle

Activities	done
Check the tyre pressure on all tyres	
Check the tyre pressure of the spare wheel	

#### Body

Activities	done
Check the function of the doors, windows and pop-up roof	
Check the function of all external locks	

#### Gas system

Activities	done
Put the gas bottle in the gas bottle compartment, tie down and connect to the gas pressure regulator	

#### Electrical system

Activities	done
Connect to 230 V external power supply	
Fully charge living area and starter battery ▶ Charge the battery for at least 20 hours after laying up.	
Connect the living area battery with the 12 V power supply (see Chapter 10)	
Check that the electrical system are working, e.g. interior light, socket and all installed electrical appliances	

#### Appliances

Activities	done
Check the function of the icebox	
Check the function of the heater	
Check the function of the gas cooker	

## 13 Maintenance

### 13.1 Official inspections

An official general inspection (HU) of roadworthiness has to be carried out by a recognised body (such as "TÜV", "DEKRA") at regular intervals in accordance with Section 29 of the German Traffic Licencing Regulations ("Straßenverkehrszulassungsordnung" (StVZO)) on vehicles that are registered in Germany.

The respective local regulations apply in other counties.

An authorised specialist workshop has to inspect the gas system every 2 years. This also applies for not registered vehicles. Modifications to the gas system must be checked immediately by an authorised specialist workshop. The authorised specialist workshop certifies the inspection and the proper state in a gas inspection certificate. The gas inspection sticker is applied on the rear of the vehicle near the licence plate.

### 13.2 Inspection work

Like any technical appliance, the vehicle must be inspected at regular intervals.

This inspection work must be carried out by qualified personnel.

The service centre in charge will confirm the work performed.

Have chassis inspections confirmed in the chassis manufacturer's customer service booklet.



- Observe the inspections specified by the manufacturer and have them carried out at the specified intervals. The value of the vehicle is thus preserved.
- The confirmation of the inspection work carried out also serves as valid proof in the case of damage and claims under the guarantee.

## 13.3 Maintenance work

### 13.3.1 General

As with every machine, this vehicle requires maintenance. The extent and frequency of the maintenance work required depend on conditions of operation and use.

More difficult operating conditions make it necessary to service the vehicle more often.

Have the basic vehicle and the appliances serviced at the intervals specified in the corresponding instruction manuals.

### 13.3.2 Pop-up roof maintenance work



The maintenance instructions below must be followed several times (but at least once) per year, depending on how often the pop-up roof is used.

- If necessary, readjust the pop-up roof's lock after it has been used several times.
- Ventilate the cloth bellows several times per year so that there is no musty smell.
- For the version with a belt lock, check the belt straps and the tabs for function or damage, if necessary.
- Follow the care instructions of the SCA company.

## 13.4 Spare parts



- Every alteration of the original condition of the vehicle can alter road behaviour and jeopardize road safety.
- The special equipment and original spare parts recommended by Dethleffs have been specially developed and supplied for your vehicle. Your Dethleffs dealer has these products. Your Dethleffs dealer is informed about admissible technical details and carries out the required work correctly.



- The use of accessories, parts and fittings not supplied by Dethleffs may cause damage to the vehicle and jeopardize road safety. Even if an expert's report, a general type approval or a design certification exists, there is no guarantee for the proper quality of the product.
- No liability can be assumed for damage caused by products which have not been approved by Dethleffs. This also applies to impermissible alterations to the vehicle.

For safety reasons, spare parts for pieces of equipment must correspond with manufacturer's instructions and be permitted by the manufacturer as a spare part. These spare parts may only be fitted by the manufacturer or an authorised specialist workshop.

Dethleffs dealers are available to meet your spare parts requirements.

When ordering spare parts, please state the serial number and vehicle type to your Dethleffs dealer.

The vehicle described in this instruction manual is built and equipped to factory standards.

Special equipment is offered depending on its purpose or use.

When fitting special equipment check if such equipment has to be entered in the vehicle documents. Observe the max. permissible gross weight. Your Dethleffs dealer would be pleased to advise you.

## 13.5 Vehicle identification plate

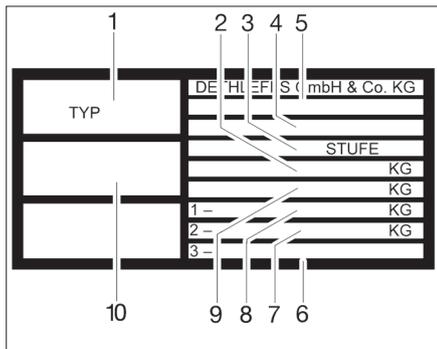


Fig. 85 Vehicle identification plate

- 1 Type
- 2 Maximum permissible gross weight of the vehicle with trailer
- 3 Chassis number
- 4 Manufacturer of the unit (add-on unit)
- 5 EC type approval number
- 6 Permissible rear axle load (for tandem axle)
- 7 Permissible axle load rear
- 8 Permissible axle load front
- 9 Maximum permissible gross weight of the vehicle
- 10 Serial number

The vehicle identification plate (Fig. 85) with the serial number is mounted in the area of the passenger's door.

Do not remove the vehicle identification plate.

The vehicle identification plate:

- Identifies the vehicle
- Helps with the procurement of spare parts
- Together with the vehicle documents identifies the vehicle owner

## 13.6 Warning and information stickers

There are warning and information stickers on and inside the vehicle. Warning and information stickers are for the sake of safety and must not be removed.



Replacement stickers can be obtained from an authorised dealer or the service centre.

## 13.7 Changing tyres



Observe the information from the vehicle manufacturer's instruction manual.

## 14 Troubleshooting

### 14.1 Electrical system



- When the living area battery is changed, only use batteries of the same type.



See Chapter 10 for changing the fuses.

Fault	Cause	Remedy
Interior lighting does not work	LED lighting strip faulty	Replace LED lighting strip
	Fuse on the transformer/rectifier is defective	Replace fuse on the transformer/rectifier
No 230 V power supply despite connection	230 V automatic circuit breaker has triggered	Switch on 230 V automatic circuit breaker
Starter or living area battery is not charged when operated in 230 V mode	Jumbo flat fuse (40 A) on the starter or living area battery is defective	Replace jumbo flat fuse (40 A) on the starter or living area battery
	Charger module in the transformer/rectifier is defective	Contact customer service

Fault	Cause	Remedy
Starter or living area battery is not charged when operated in 230 V mode	Fuse (20 A) for integrated charging module in the transformer/rectifier not inserted/is faulty	Insert/replace fuse (20 A) in transformer/rectifier
Living area battery is not charged during vehicle operation	Fuse (2 A) on D+ generator faulty	Replace fuse
	Disconnecter relay in the transformer/rectifier is defective	Contact customer service
	Charging booster faulty	Contact customer service
12 V indicator lamp does not light up	12 V power supply switched off	Switch 12 V power supply on
	Battery cut-off switch on the transformer/rectifier is switched off	Set battery cut-off switch to on
	Starter or living area battery is not charged	Charge the starter or living area battery
	Disconnecter relay in the transformer/rectifier is defective	Contact customer service
	Flat fuse (2 A) in the living area battery is defective	Replace flat fuse (2 A) in the living area battery

Fault	Cause	Remedy
12 V power supply does not work in 230 V operation	12 V power supply switched off	Switch 12 V power supply on
	Battery cut-off switch on the transformer/rectifier is switched off	Set battery cut-off switch to on
	Charger module in the transformer/rectifier is defective	Contact customer service
	230 V automatic circuit breaker has triggered	Contact customer service
	Jumbo flat fuse (40 A) on the living area battery is defective	Replace jumbo flat fuse (40 A) on the living area battery
	Fuse (2 A) in the living area battery is defective	Replace fuse (2 A) in the living area battery
Starter battery is discharged in 12 V operation	Disconnecter relay in the transformer/rectifier is defective	Contact customer service

Fault	Cause	Remedy
No voltage is supplied by the living area battery	Living area battery is discharged	Charge living area battery immediately  Total discharge damages the battery.  If the vehicle is to be laid up for a long period, fully charge the living area battery beforehand
	Jumbo flat fuse (40 A) on the living area battery is defective	Replace jumbo flat fuse (40 A) on the living area battery

## 14.2 Gas system



- In case of a defect of the gas system (gas odour, high gas consumption) there is danger of explosion! Close the regulator tap on the gas bottle immediately. Open doors and windows and ventilate well.
- In case of a defect in the gas system: Do not smoke; do not ignite any open flames, and do not operate electric switches (light switches etc.).
- Have the defect in the gas system repaired by an authorised specialist workshop.

Fault	Cause	Remedy
No gas	Gas bottle empty	Changing gas bottles
	Gas isolator tap closed	Open the gas isolator tap
	Regulator tap on the gas bottle is closed	Open regulator tap on the gas bottle
	Outdoor temperature too low (0°C in the case of butane gas)	Wait for higher external temperatures
	Built-in appliance is defective	Contact customer service

## 14.3 Cooker

Fault	Cause	Remedy
Ignition fuse does not operate (flame does not burn after the control knobs are released)	Heat-up time is too short	Keep control knob pressed for approx. 15 to 20seconds after ignition
	Ignition fuse is defective	Contact customer service
Flame extinguishes when being reduced to its minimum setting	Thermocouple sensor is incorrectly set	Set thermocouple sensor correctly (do not bend). The sensor tip should protrude by 5 mm beyond the burner. The sensor neck should not be more than 3 mm away from the burner ring; if necessary, contact customer service





Dethleffs GmbH & Co.KG  
Arist-Dethleffs-Straße 12 • D-88316 Isny im Allgäu  
[www.dethleffs.com](http://www.dethleffs.com) • [info@dethleffs.com](mailto:info@dethleffs.com)

***Dethleffs***  
A friend of the family