

for the flat-jack® camper 2.0

Article number: 426032833 020 3

Original manual in German language



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1 Important safety precautions

Only use the flat-jack® for the intended purpose described in this manual. Otherwise you may endanger yourself or damage the flat-jack® itself or parts of your vehicle.

Remaining risks in the event of misuse or improper use

Your flat-jack® has been carefully designed and manufactured using the best possible materials, the latest technology and special processes tailored to the application.

Nevertheless, the risk of the raised vehicle suddenly dropping if the flat-jack® bursts or slips away cannot be completely ruled out.

This only applies in the event of improper, incorrect or unauthorized use, obsolescence or vandalism.

A bursting of your flat-jack® results in a very loud popping noise, which can lead to unpredictable reactions and/or damage to the hearing of people in the vicinity.

A sudden drop of the vehicle can lead to serious or fatal injuries if a person or parts of a person's body or an animal are under raised parts of the vehicle at this time.

However, a sudden drop of the vehicle can also pose a serious danger to people inside the vehicle. For instance, by tripping or falling, dropping objects from tables and shelves, or spilling hot liquids or food on the stove or table.

You can prevent material damage and avoidable downtimes due to leaks.

Leaks can also be caused by improper use, incorrect use or obsolescence.



Please read this manual carefully and completely before using your flat-jack®.

- ▶ Always observe all safety instructions and warnings, always use your flat-jack® as intended and comply with the permitted conditions for use and storage.
- ▶ Replace your flat-jack® immediately with a new flat-jack® if you are unable to comply with these conditions for use and storage.
- ▶ Also replace your flat-jack® with a new flat-jack® if the permissible service life has been exceeded.
- ✓ This will prevent personal injury and material damage as well as avoidable downtime.

1.1 About this manual

This manual contains important descriptions and instructions as well as safety and warning information on possible remaining risks during handling and use. This manual is essential for the safe and effective operation and handling of the flat-jack®.

Accessories

This manual also describes components that are not supplied as part of your new flat-jack®.

1.1.1 Scope of application

This manual is only valid for the **flat-jack® camper 2.0** specified on the cover sheet.

1.1.2 Storage and handover

Storage

- ▶ Keep this manual at hand with your flat-jack® at all times.

Handover to others

If the flat-jack® is ever handed over to another user:

- ▶ Pass this manual on to subsequent users.

1.2 Safety instructions and warnings

Safety-related texts as well as safety instructions and warnings in this manual indicate potentially dangerous situations and residual risks. They provide the user with active instructions on what to do and what not to do.

1.3 Used symbols and signal words

All safety instructions and warnings in this manual have been clearly highlighted. The following symbols and signal words were used for warnings.

WARNING

Warns you of dangers that **could lead to fatal or serious personal injury** if you do not follow these instructions.

CAUTION

Warns you of situations that can lead to **material damage and malfunctions** if you do not follow these instructions.

Other **signs and symbols** used in this manual:



Remove the key

Remove the key and secure the vehicle against starting and rolling away.



Tip

Reference to useful information regarding the use of the product.



Cross-references

Cross-references in this manual are marked with this symbol or in *italics*.

► **Requests for action**

This symbol indicates requests for action.

- a) **Step of action**
- b) Step of action
- c) ...

Step-by-step instructions are listed in lower case letters according to the order of action.

✓ **Intermediate or final result of an action or series of actions**

The information makes it easier to recognize whether the sequence of a step-by-step instruction manual has been successfully completed.

■ **Bullet**

indicate enumerations in descriptive and instructional parts of this manual.

2 Requirements for safe use

- ▶ Only use the flat-jack® for its intended purpose as described in this manual.
- ▶ Avoid any use not mentioned in this manual and not expressly described as intended use.
- ✓ Thus you avoid unforeseeable safety risks when using the product.

2.1 Intended use

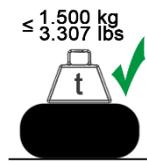
The flat-jack® has been developed and manufactured in accordance with the latest technology and recognized safety regulations.

Nevertheless, improper use or use contrary to the intended use may result in danger to life and limb of the user or third parties or damage to the flat-jack®.

The flat-jack® is an inflatable tire air cushion that can be driven on and is used exclusively

- for leveling motorhome and camper wheels on uneven terrain.

The flat-jack® may only



- lift one wheel of up to **1,500 kg** (for four-wheeled vehicles, this results in a permissible total weight of 6 metric tons)



- be used with a tire width of up to **305 mm**



- be inflated with an air pump or a compressor **with pressure gauge** and
- up to a maximum of **1.5 bar**



- lift the wheel by a maximum of **20 cm**



- be used during the permitted period of use of **20 years** from the manufacturing date

The flat-jack® must always

- be in undamaged condition and
- be used in a safety and hazard-conscious manner.

Any other use is not in accordance with the intended use and is therefore not permitted.

2.2 Improper and unintended use

Not intended use is

- the use outside the environmental and operating conditions specified in this manual
- any use outside of the intended and permitted use specified above
- handling or use of equipment or accessories not mentioned in this manual.

Explicitly prohibited are:



- the use of the flat-jack® as a **swimming aid**



- the use of the flat-jack® as a **toy**



- the use of the flat-jack® on **ice or snow** and
- the use on **sharp-edged or pointed surfaces**



- the use of several flat-jacks® **stacked** on top of each other



- the inflation of the flat-jack® in **unloaded condition** > 0.5 bar



- to lift one wheel of up to **1,500 kg** (for four-wheeled vehicles, this results in a permissible total weight of 6 metric tons)



- driving on with a tire width over **305 mm**

Continued on the next page

Explicitly prohibited are:



- driving onto an **already inflated** flat-jack®



- driving off a **still inflated** flat-jack®



- the inflation of the flat-jack® **above 1.5 bar**



- **lifting** a tire over **20 cm**



- any presence of persons **under a vehicle raised** with the flat-jack®
- any use of the flat-jack® as a **jack**



- any **repair attempts** on a damaged flat-jack®



- any **use** of the flat-jack® beyond the permissible use period of **20 years**

3 Warranty and liability

Warranty and liability claims against the manufacturer **flat-jack products GmbH** for personal injury and/or material damage are hereby excluded if they result from one or more of the following causes:

- Failure to follow this manual or parts thereof.

Especially in the case of:

- Non-intended, improper or prohibited use of the flat-jack®
- Improper use or repair of the product or its components
- Modifications to the product or its components
- Disasters, external influences or force majeure

For personal injury or damage to property caused by the

- failure to observe the safety instructions and/or warnings in this manual or by the
- not intended or improper or prohibited use or by the
- failure to observe the usual care and caution during all phases of use,

flat-jack products GmbH assumes no responsibility or liability whatsoever.

This shall also apply if there is no specific or explicit warning of possible personal injury or damage to property in the safety or warning instructions or other texts in this manual.

4 Technical data

Environmental conditions

Permitted storage temperature	-20 °C to +50 °C
Permitted temperature during use	-20 °C to +40 °C
Place of use	even, load-bearing and without pointed or sharp-edged surfaces

Product specifications

Dimensions in mm	<ul style="list-style-type: none"> ■ Height: 30 ■ Width: 620 ■ Depth: 620
Weight in kg	<ul style="list-style-type: none"> ■ 1.0
Inner material:	<ul style="list-style-type: none"> ■ PU membrane ■ Interior design especially for camping vehicles
Outer material:	<ul style="list-style-type: none"> ■ PU/nylon fabric-reinforced and double-walled high-frequency welded ■ Automotive quality valve with special flat-jack® valve cap
Operating pressure in bar	<ul style="list-style-type: none"> ■ 0.6–1.5
max. pressure in bar	<ul style="list-style-type: none"> ■ 1.5
Load capacity	<ul style="list-style-type: none"> ■ 1 flat-jack® tire air cushion is suitable for up to 1,500 kg*
* with two cushions (3,000 kg), this results in a total permitted weight of 6 tons for a four-wheeled vehicle.	
available sizes	<ul style="list-style-type: none"> ■ up to 305 mm tire width
Compensation height	<ul style="list-style-type: none"> ■ up to 20 cm lifting height at the wheel ■ Compensation height depends on weight

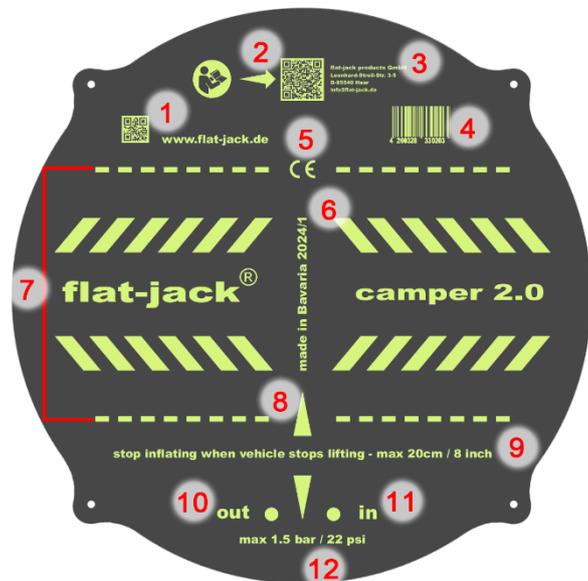
Required accessories – not supplied

- Spirit level
- Air pump or compressor **with pressure gauge**
- Cut and puncture-resistant surface for rocky ground
- Suitable cover for direct sunlight (e.g., cloth, cardboard, etc.)

Optional accessories and spare parts

flat-jack® valve cap	Article and order number: 1009241
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5 Printing and identification



- 1 QR code to the website
- 2 QR code for the manual
- 3 Manufacturer
- 4 Article number / EAN code
- 5 CE label
- 6 Batch number
- 7 Lane
- 8 Center marking
- 9 Maximum compensation height
- 10 Outlet valve "out"
- 11 "in" filling valve
- 12 Maximum pressure

Image 1: Printing and identification of the flat-jack®

6 Main components and functions



Image 2: Main components of the flat-jack®

The **flat-jack®** is an inflatable tire air cushion that can be driven on to level out motorhome and camper tires on uneven terrain.

It consists of the following main components:

- 1 flat-jack® tire air cushion
- 2 Air valves “in” and “out”

The **flat-jack® (1)** is placed under one of the tires of your vehicle to be lifted.

Using an air pump or a compressor with a pressure gauge, the flat-jack® is inflated with air via the “**in**” **filling valve (2)**.

This allows height compensation to be achieved, for instance on uneven terrain.

The air is released after use via the “**out**” **outlet valve (2)**.

6.1 flat-jack® tire air cushion



Image 3: Components of flat-jack® tire air cushion

Membrane concept

The **flat-jack®** features a double-walled structure.

The **inner membranes** of the flat-jack® ensure maximum impermeability.

The **outer shell** ensures durability and dimensional stability.

Chamber concept

Several stabilizing bars inside the flat-jack® ensure optimum dimensional stability of the loaded flat-jack®.

Thanks to this special design, even heavy camping vehicles can be stabilized.

6.2 Air valves – “in” and “out”



Image 4: Air valves

Both valves are protected with special flat-jack® valve caps. These are each equipped with a seal.

There is no valve insert in the “out” outlet valve (1). As a result, the flat-jack® can be quickly and completely deflated via the side air outlet openings in the valve cap.

For this, the valve cap does not need to be removed.

The “in” filling valve (2) is also equipped with a valve insert, which allows the air to be filled in or released in a targeted manner.

6.3 Optional accessories and spare parts

Special flat-jack® valve cap – spare part

flat-jack® valve cap

Article and order number: 1009241

7 Positioning and inflating

7.1 Determining the vehicle level and preparing the surface

Required accessories – not supplied

- Spirit level
- Cut and puncture-resistant mat for sharp-edged surfaces (e.g., sharp stones, etc.)

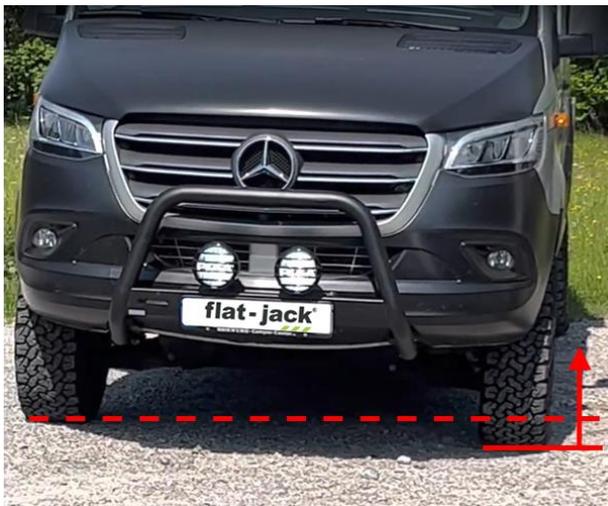


Image 5: Determining the vehicle position



Secure vehicle against rolling away

- ▶ Park the vehicle safely.
- ▶ Secure the vehicle against rolling away.
- ▶ For this, activate the parking brake and engage first gear or move the selector lever to "P".
- ▶ Take the ignition key of your vehicle.

Determining the vehicle level

- ▶ Determine your vehicle level or the tire to be raised using a spirit level.

Preparing the surface

- ▶ Remove sharp-edged or pointed rocks and objects from the ground or place a cut- and puncture-resistant mat in front of or behind the tires to be lifted.

7.2 Positioning the flat-jack®



Image 6: Correct positioning of the flat-jack®

CAUTION

- ▶ **Never** use more flat-jacks® than specified in the following table and
- ▶ **never** stack several flat-jacks® on top of each other.
- ✓ This will help you prevent unstable situations with your vehicle.

Vehicle:	Permitted max. number:
Camper 2 wheels	1x flat-jack®
Camper 4 wheels	2x flat-jack®
Camper 4 wheels	2x flat-jack®
Camper 6 wheels	3x flat-jack®

- a) Prior to use, inspect the flat-jack® for external damage and the integrity of the air valves.
- b) Place the flat-jack® straight in front of or behind the tire to be lifted.

Ensure hereby that the marked "lane" can be driven on in the middle and that the air valves are freely accessible on the outside.

- ✓ This will help you to prevent damage to the valves and the flat-jack® itself.

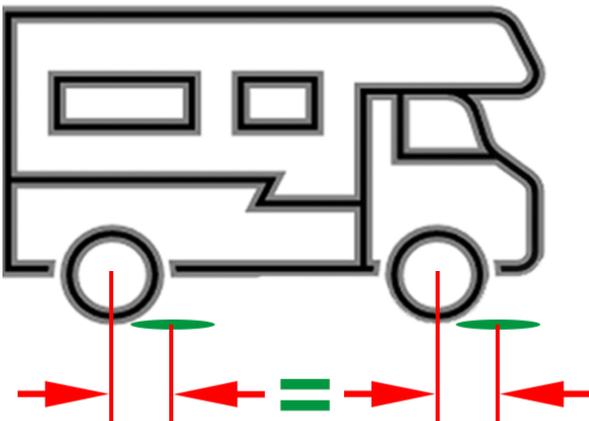


Image 7: Identical distance to the tire



When using two flat-jacks®, both tire air cushions must be positioned at the same distance from the wheels to be lifted.

7.3 Positioning the vehicle correctly

Required accessories – not supplied

- Spirit level



Image 8: Drive vehicle up



Image 9: Observe center

CAUTION Do not damage flat-jack®

- ▶ Inspect your tire tread for foreign objects or sharp stones.
- ▶ Carefully remove these.
- ▶ Never run over the air valves of the flat-jack®.
- ▶ Never drive onto an already inflated flat-jack®.
- ▶ Never perform steering movements on an occupied flat-jack®.

Drive vehicle up

- ▶ Drive your vehicle slowly and carefully into the marked lane of the airless flat-jack®.

Ensure centered position

- ▶ Drive onto the flat-jack® until the vehicle axle is above the center mark.



Secure vehicle against rolling away

- ▶ Park the vehicle safely.
- ▶ Secure the vehicle against rolling away.
For this, activate the parking brake and engage first gear or move the selector lever to "P".
- ▶ Take the ignition key of your vehicle.

7.4 Inflating the flat-jack®

Required accessories – not supplied

- Spirit level
- Air pump or compressor **with pressure gauge**
- Suitable cover for direct sunlight (e.g., cloth, cardboard, etc.)



Image 10: Opening the valve cap



Image 11: Connecting the air pump



Is the vehicle secured against rolling away?



WARNING against potentially dangerous vehicle movements

- ▶ Ensure that people in the vehicle remain secured as they would while driving.
- ▶ Do not turn on any cooking appliances until the height compensation has been completed.

Filling the flat-jack®

- Unscrew the valve cap from the “in” filling valve.
- Connect your air pump or a compressor.

CAUTION Prevent material damage

- ▶ Never fill the flat-jack® above 1.5 bar or
 - ▶ lift your vehicle wheel more than 20 cm.
- Inflate the flat-jack®.
When using two flat-jacks® under two different wheels, inflate both alternately and evenly.
- ✓ This will prevent any false leveling of the vehicle.
- Screw the valve cap back onto the air valve in a clockwise direction.
 - Cover the flat-jack® in direct sunlight, e.g., with a cloth or cardboard.

8 Checking

Required accessories – not supplied

- Spirit level
- Air pump or compressor **with pressure gauge**



Image 12: Check pressure, inflate if necessary



Checking the pressure

- ▶ Check the pressure of the flat-jack® after 3 days at the latest, and subsequently at regular intervals.
- ▶ Check your vehicle level with a spirit level or
- ▶ check the pressure in the flat-jack®

In case of discrepancies:

- ▶ If necessary, inflate the flat-jack® again.
To do this, work as described in *point 7.4 Inflating the flat-jack®*.

9 Deflating and driving down

9.1 Deflating the flat-jack®



Image 13: Deflating the flat-jack®

Deflate the air

CAUTION Prevent personal injury and material damage

The pressure in the cushion escapes quickly. The vehicle will drop very quickly and possibly create crushing points.

- ▶ Keep all body parts out of the hazardous areas.
- ▶ Ensure that no other persons are present in hazardous areas.
- ▶ In particular, keep children away from the vehicle.
- ▶ Open the flat-jack® valve cap on the “out” outlet valve until the air starts to audibly flow out.



Leave the valve cap on the outlet valve.

- ▶ Never unscrew it completely.

✓ This will help you to prevent the loss of the special flat-jack® valve cap.

- ▶ Close the valve cap clockwise as soon as the flat-jack® is completely empty.

In case you have used several flat-jacks®:

- ▶ Repeat the process on all flat-jacks® used.

9.2 Drive vehicle down



Image 14: Drive vehicle down

CAUTION Never drive off a still inflated flat-jack®.

- ▶ Drive your vehicle slowly and straight down from the flat-jack® until the latter is clear.
- ▶ Never perform steering movements on the flat-jack®.
- ▶ Never run over the air valves of the flat-jack®.

10 Cleaning and storage

- ▶ Only **clean** your flat-jack® with a damp cloth and a little detergent in water.

CAUTION Never use **corrosive** cleaning products.

- ✓ This will help you to protect sensitive surfaces from damage.

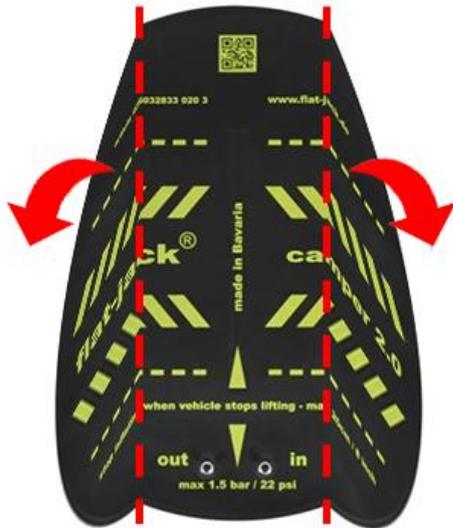


Image 15: Folding together the flat-jack®

Preparing for the next use

Exceeding the permissible service life or damage can lead to sudden drops of the vehicle.

- ▶ Replace your flat-jack® if you recognize one of the following conditions:
 - the permitted period of use of 20 years from the manufacturing date has been exceeded.
The manufacturing date is indicated on the print with the batch number.
 - there is evidence of damage to the outer shell or the valves.

Storing the flat-jack®

CAUTION The stabilizing bars of the flat-jack® must not be bent and thereby damaged.

- ▶ Only fold the flat-jack® at the points illustrated in *Image 15*.
- ▶ Store your flat-jack® together with its manual in a safe place.
- ▶ Never put pointed, sharp-edged or heavy objects on the flat-jack®.

11 Checking and disposal

Recognizing leakages – taking corrective measures

Malfunction	Possible cause	▶ Corrective measures
The flat-jack® loses air	flat-jack® valve cap on the “out” outlet valve is not fully closed	▶ Close the valve cap on the outlet valve completely. If this is unsuccessful: ▶ Replace the flat-jack® valve cap.
	Valve insert of the “in” filling valve is not airtight, has come loose or is missing	▶ Check the valve insert in the filling valve, ▶ screw it tight if necessary or ▶ have the valve insert replaced in a workshop
	The flat-jack® itself is not airtight or is defective	The outer shell of the flat-jacket® consists of a fabric-reinforced PU layer and an inner PU membrane. It cannot be glued or repaired in any other way. ▶ Dispose of the flat-jack® in household waste.

Disposal



The flat-jack® does not contain any components that need to be disposed of at a special disposal site.

- ▶ Dispose of your flat-jack® in household waste.

12 EC Declaration of Conformity

according to the

EC Directive for Machinery 2006/42/EC, Annex II 1 A, EU Official Journal L 157/24 of 06/09/2006

Product designation	flat-jack® camper 2.0
Identification	Printing on the top
Batch number	2024/1
Manufacturing date	from 2024
Manufacturer and address	flat-jack products GmbH Leonhard-Strell-Str. 3 - 5 85540 Haar, Germany
Authorized representative for documentation	Mr. Swen Dillmann, Mr. Manfred Köstlmeier

As the manufacturer and under our sole responsibility, we hereby declare that the above-mentioned product for lifting loads has been developed, designed and manufactured in accordance with the above-mentioned EU harmonization legislation and fully complies with its applicable requirements.

The internal technical documentation in accordance with Annex VII Part A provides evidence of this.

Applied harmonized standards or common specifications of the Commission:	EN ISO 12100:2010 – Risk assessment and risk reduction Official Journal of the EU: OJ C 110 – 08/04/2011
	EN 13155:2003+A2:2009 – Loose lifting accessories – Clause 5.1.1.1. Official Journal of the EU: OJ C 214 – 08/09/2009
	EN ISO 20607:2019 – Manual Official Journal of the EU: OJ L 102 – 02/04/2020 with
	EN IEC / IEEE 82079-1:2021 via reference from EN ISO 20607

Applied conformity assessment procedure:	The product for lifting loads is subject to the conformity assessment procedure based on internal manufacturing control.
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The handwritten, signed original document is part of the documentation supplied with the product.