



USER MANUAL

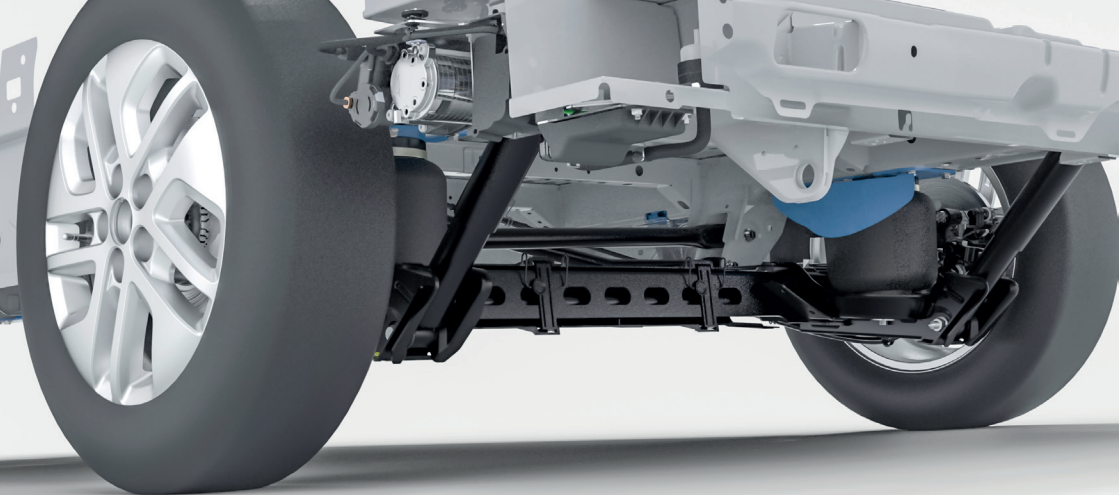
making everyday smoother



• Increased comfort • Better driveability • More safety



VB-NIVOAIR
COMMERCIAL VEHICLE - MOTORHOME
INFORMATION - MANUAL - SERVICE



Better safety and comfort on the road

It's all under control with VB-Airsuspension systems

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Basic information



Vehicle information

Make:

Model:

Chassis number:

Kilometre reading:

km

VB identification number:

Kit number:

Production date:

Homologation documentation:

TÜV certificate:

TÜV parts certificate:

TÜV parts certificate, increase in permitted total weight:

General approval:

Lono / floor panel lighting:

Type approval:

Fitting station information

Company name:

Address:

Postcode/city:

Country:

Telephone:

Employee:

Date of fitting:

"Air suspension systems from VB-Airsuspension – for greater comfort and optimum handling in all situations."

Dear customer,

Congratulations! Your vehicle is equipped with the fully automatic VB-NivoAir air suspension system from VB-Airsuspension B.V.

This user manual tells you everything you need to know about how to use the air suspension system and how it works. It also includes some important safety instructions.

We wish you a pleasant ride!

VB-Airsuspension B.V.

About this user manual

- Carefully read this user manual all the way through before using the vehicle. Otherwise, safe and error-free operation cannot be guaranteed.
- Observe all safety instructions and warnings in this user manual.
- This documentation is an integral part of the product and must be handed over to the purchaser if you sell the vehicle. Keep it with the vehicle documents.

Meaning of symbols



Strict observance of the warnings may prevent personal injury and/or material damage.

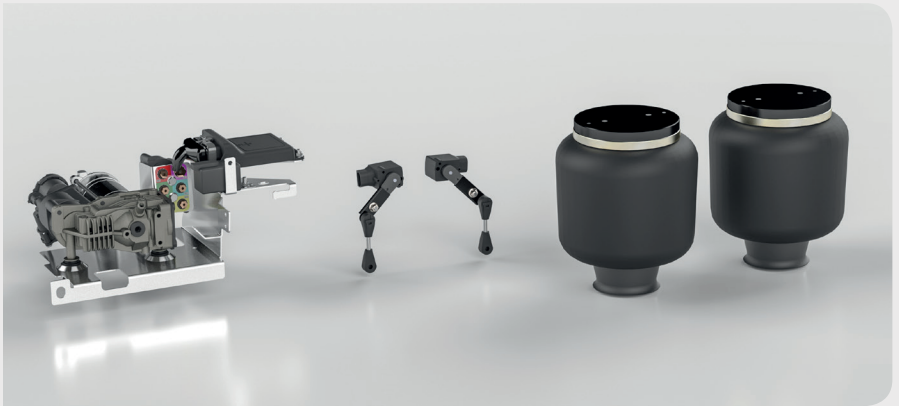


Special instructions to aid clarity and ease of use.

System overview

Your system is equipped with the fully automatic air suspension system shown below.

VB-NivoAir



“Read and follow all the safety instructions. This is important for your own safety.”

Product description

VB-NivoAir is a fully automatic, electronically-controlled air suspension system for light commercial vehicles, motorhomes and special vehicles. The electronic control system ensures that the vehicle maintains the same ride-height in any load situation. The ride-height is controlled by height sensors mounted between the chassis and the axle. Height control is always active after switching on the ignition or during the extra time.

- The automatic level control on the VB-Airsuspension system cannot prevent damage to the vehicle or superstructure due to overload.
- Always make sure the vehicle is not overloaded.
- When using the air suspension system, overloading is not visible.
- If you are in any doubt, VB-Airsuspension advises that you weigh the axles before driving the vehicle.

Use

The VB-Airsuspension system improves the suspension and automatically controls the height of the front and rear axles on the chassis.

Improper use can have undesirable consequences. VB-Airsuspension is not liable for any resulting damage.

Note:

To be able to use the vehicle functions effectively, the various vehicle components need to be run in for several kilometres. Minor side effects may be experienced when the vehicle first driven.



For example, the expected levels of comfort may not be immediately apparent or noises may be heard.

Safety rules



Note:

The built-in air suspension system must not be modified.

- Always use a jack or hydraulic ramp to change a wheel or carry out servicing work.
- Do not use the air suspension system when raising one or more axles with a jack or hydraulic ramp.
- Errors and/or faults in the air suspension system can have an undesirable effect on driving stability. This may cause the vehicle to sway and/or swing.

Fully automatic air suspension system (VB-NivoAir)

This fully automatic, electronic air suspension system (VB-NivoAir) consists of a compressor box and a height sensor. In the case of this air suspension system (VB-NivoAir), the system itself controls the required air pressure.

Increasing/decreasing the ride height

1. This air suspension system (VB-NivoAir) is a fully automatic system with no control options as standard.
2. The system increases or decreases the ride height automatically.

Risk of damage!



In case of damage or faults that cannot be rectified, deactivate the system by removing the fuses. Contact an approved VB-partner immediately.

The check light comes on to indicate a fault. If this happens, drive extra carefully and at much lower speed.

"You may contact us at any time if you have questions or if anything is unclear. Send an e-mail to info@vbairsuspension.com."

Reset system

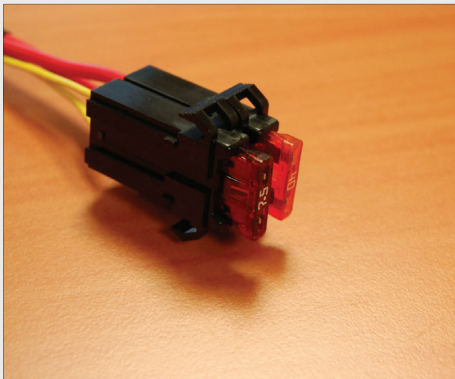
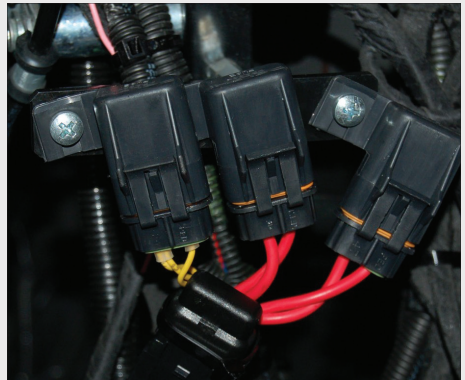
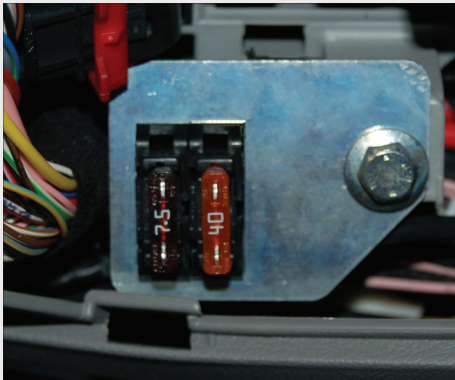
1. Switch the ignition off and on again.

Alternatively

- Remove the fuse (7.5 A) from the fuse box. This is located in the dashboard or under the driver's seat.



7.5 A fuse – for the controller
40 A fuse – for the compressor



Troubleshooting

- Functional faults can be diagnosed using the table below. If you cannot correct the fault, contact your nearest trained VB-Airsuspension partner.
- In case of air loss, immediately contact an authorised specialist workshop and drive extra carefully at a much lower speed (max \pm 30 km/h.).
- Information about trained partners and the spare parts you might need can be obtained from VB-Airsuspension Aftersales. They will be pleased to help.

Tracing faults

Fault	Possible cause	Remedy
Compressor not working.	Ignition switched off.	Switch on ignition.
	40 A fuse faulty.	Replace the 40 A fuse.
	Battery voltage too low.	Charge the battery.
Compressor does not switch off.	Compressor relay faulty.	Replace the 40 A relay.
	Air loss.	Consult workshop.
Air suspension does not lower.	7.5 A fuse faulty.	Replace the 7.5 A fuse.
	Valve block faulty.	Consult workshop.
	Dump valve faulty.	Consult workshop.
Air suspension does not raise.	Vehicle too heavily loaded.	Reduce load.
	7.5 A fuse faulty.	Replace the 7.5 A fuse.
	Valve block faulty.	Consult workshop.



In case of faults that are not mentioned in this table or that you cannot rectify yourself, contact a trained VB-Airsuspension partner.

"If your fault does not appear in the table, contact your conversion station (see page 3)."

Correcting faults






To clear a fault, turn the ignition on and off again. The fault is now cleared. Contact your conversion station if the fault keeps coming back.

Check light

The check light is in the engine compartment or in the cab (fuse box).

- The check light comes on for one second:
The system has started correctly.
- The check light remains lit:
The vehicle is not at ride height.
- The check light keeps flashing:
The system is detecting a fault (see error code for solution).

Below are the possible error codes and the faults they refer to.

Basic	Description of fault	Remedy
 (2)	Compressor used too intensively. Thermal cutout.	Allow compressor to cool down.
		Contact workshop if the fault keeps coming back.
 (2)	Valve block used too intensively. Thermal cutout.	Allow valve block to cool down.
		Contact workshop if the fault keeps coming back.
 (3)	Level sensor alarm.	Contact workshop if the fault keeps coming back.
 (5)	Battery voltage too low to raise the air suspension.	Start the vehicle's engine.
 (5)	Battery voltage too low.	Charge the vehicle's battery.



In case of faults that are not mentioned in this table or that you cannot rectify yourself, contact your conversion station or a trained partner of VB-Airsuspension.

Maintenance

VB-Airsuspension systems are low maintenance. However, regular cleaning and visual inspections will help to reduce natural wear.

The following components must be checked for wear, leaks and damage during servicing:

- Air springs
- Air tubes
- Shock absorbers

The level of the vehicle may drop gradually if it is not used for long periods. To avoid permanent deformation and damage to the air springs:

- The vehicle should be supported with corner steadies (accessories).
- The air springs should be re-inflated with compressed air once a week.

Permitted cleaning agents:

- Soap solution
- Ethanol
- Methanol
- Isopropyl alcohol

Not permitted:

- Organic solvents
- Abrasives
- Steam and high-pressure cleaners
- Naked flames

"Keep a record of all services, so you have as full an overview as possible of work done on the vehicle."

Servicing

Maintenance inspections can be entered below. This allows you to see when the system was inspected and whether repairs were carried out.

- Ask your conversion station to enter the information relating to service inspections.

Date: ___ - ___ - _____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

Date: ___ - ___ - _____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

Date: ___ - ___ - _____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

Date: ____ - ____ - ____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

Date: ____ - ____ - ____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

Date: ____ - ____ - ____	Stamp:
Kilometre/mileage reading _____ km.	
Work carried out:	
_____ _____ _____	

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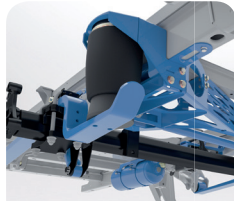
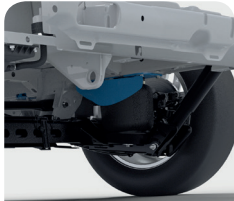
VB-Airsuspension B.V. is constantly working to develop its products. We trust you will understand that, for this reason, the scope of delivery, the design, the functionality and the technology may vary. The content of this manual is a snapshot view of the situation as at the time it was written. VB-Airsuspension reserves the right to introduce technical changes at any time without warning.

The design of the air suspension system takes into account the maximum permitted weight of the vehicle. Because the vehicle always adjusts to ride-height regardless of load, overloading is less visible. The chance of overloading is therefore greater. Never overload the vehicle, as the suspension system and other components of the vehicle may be damaged as a result. Weigh the vehicle if you are not sure whether it is overloaded. No claims will be admitted for damage caused by overloading.

If the suspension system develops a fault, it is inadvisable to continue driving in view of the damage that may result. In exceptional cases, it is possible to continue driving at reduced speed and taking suitable precautions.



VB-Airsuspension is one of the few European manufacturers producing a wide range of (air) suspension systems. From semi air suspension and simple reinforced coil spring suspension to full air suspension systems, we offer customers the ideal solution for a range of applications, such as ambulances, car transporters, motorhomes, 4x4 vehicles and pick-ups. Now you can see why an increasing number of truck and body manufacturers are incorporating VB-Airsuspension's systems in their own ranges.



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