

SUSPENSION SYSTEMS

making everyday smoother



airsuspension



DISCOVER THE POSSIBILITIES OF VB-AIRSUSPENSION

BETTER SAFETY AND COMFORT ON THE ROAD.

VB-FullAir

Full air suspension



THE BEST SOLUTION FOR SUSPENSION PROBLEMS.

VB-FullAir: full air suspension with extensive control options

Full air suspension is an automatic, adjustable solution to a (suspension) problem where the existing leaf or coil spring suspension is replaced by a full air suspension system. This system includes air springs, shock absorbers, height sensors, a compressor and an electronic control unit (VB-ASCU).

VB-FULLAIR AIR SUSPENSION SYSTEMS FROM VB-AIRSUSPENSION COME WITH A REMOTE CONTROL THAT CAN BE USED TO EASILY OPERATE VARIOUS FUNCTIONS OF THE SUSPENSION SYSTEM.

The air suspension system filters out unevenness in the road surface, improving ride comfort. While driving, the vehicle will constantly remain at the ride height set by VB-Airsuspension during installation. The standard ride height is determined during the development of the air suspension and is fixed.

The ride height is the ideal height for comfort and stability. The driveability and stability of the vehicle are improved, which in turn increases safety. The access/loading platform height can be raised and lowered when the vehicle is at a standstill (in some cases with the handbrake on), allowing for easy vehicle entry/exit and for loading/unloading goods.

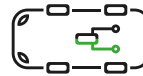
VB-FullAir Full air suspension	Increases ride height	Minimises sagging	Reduces vehicle roll	Improves suspension comfort
	++ ++	++ ++ ++	++ ++	++ ++
	Improves driving characteristics	Increases safety	Improves stability	Control options
	++ ++	++	++	++ ++



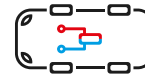
DISCOVER THE VARIOUS FULL AIR SUSPENSION SYSTEMS.

Our full air suspension systems can be divided into three different categories:

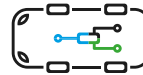
VB-FullAir 2C rear axle:



VB-FullAir 2C front axle:



VB-FullAir 3C:



VB-FullAir 4C:



A VB-FULLAIR SYSTEM IS OFTEN FITTED TO MEET THE FOLLOWING REQUIREMENTS:

INCREASED RIDE HEIGHT
 REDUCED OFF-CENTRE LEVEL
 REDUCED VEHICLE ROLL
 IMPROVED SUSPENSION COMFORT
 IMPROVED DRIVING CHARACTERISTICS
 INCREASED SAFETY
 IMPROVED STABILITY
 CONTROL OPTIONS (E.G. VEHICLE CAN BE RAISED/LOWERED)





BENEFITS OF VB-FULLAIR:




- CONTROL OPTIONS
- CONSTANT RIDE HEIGHT
- IMPROVED COMFORT
- OPTIMUM ROAD HOLDING
- INCREASED STABILITY
- COMFORTABLE RIDE FOR PASSENGERS
- IMPROVED PROTECTION FOR FRAGILE GOODS
- LESS WEAR ON TYRES/BRAKES

ADJUSTING THE HEIGHT OF THE VEHICLE IS SIMPLE.

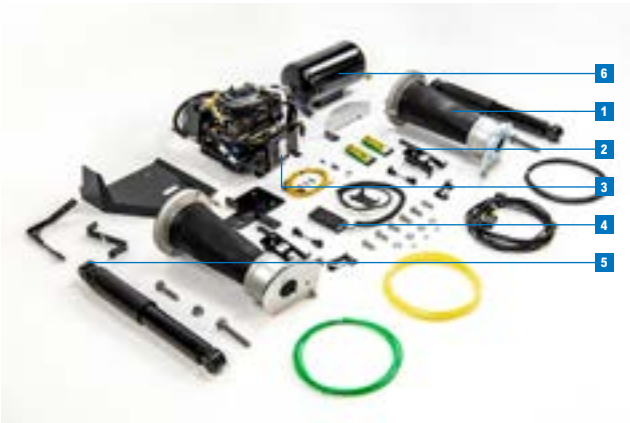
VB-FULLAIR 2C - LCV

	Memory function – stored height is activated.	< 30 km/h
	Manual control to vary the loading/unloading height.	< 0 km/h

The height of the air suspension can only be set when the vehicle is at a standstill (for loading and unloading).

	Ferry – the rear is raised to the maximum level, for example to make the vehicle easy to drive onto a ferry.	< 30 km/h
	Load space – the front axle is automatically raised and the rear is lowered to the maximum level to make it easy to load and unload the vehicle at the rear.	< 0 km/h
	Manual control to vary the loading/unloading height.	< 0 km/h

The Ferry function lets you temporarily adjust the ride height at a maximum speed of 30 kilometres an hour. The other functions can only be operated when the vehicle is at a standstill.

































VB-FullAir 2C

VB-FullAir 2C is a complete air suspension system on the front or rear axle of the vehicle. 2-Corner indicates that two height sensors are fitted. VB-FullAir 2C for the front axle is only available for certain makes and types.



The VB-FullAir 2C system is supplied with one of the remote controls shown opposite. You can use the remote control to easily control various functions of the system.

THE VB-FULLAIR 2C SETS INCLUDE:

	VB-FullAir 2C rear axle, leaf suspension	VB-FullAir 2C rear axle, coil suspension	VB-FullAir 2C front axle, coil suspension
	Main springs		
	Bellows		 *
	Height sensors		
	VB-ASCU (control unit)		
	Remote control		
	Shock absorbers (in most cases)		
	Air tank		
	Fasteners		
	Fitting instructions		
	User manual		
	Approval documentation		

* Front legs equipped with air springs.

FRONT AND REAR ALWAYS AT RIDE HEIGHT.

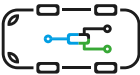
VB-FULLAIR 3C - MOTORHOME		
	 Off Road – increase of around 30 mm for greater ground clearance on rough terrain.	< 30 km/h
	Car Park – lower the vehicle to virtually the maximum level to make it easier to get in and out. You can also use this function (depending on the original vehicle height) to reduce the ride height in order to enter a car park with a low roof or to drive under a gate.	< 30 km/h
	Manual control to vary the loading/unloading height.	< 0 km/h
	Ferry – the rear is raised to the maximum level, for example to make the vehicle easy to drive onto a ferry.	< 30 km/h
	Load space – the front axle is automatically raised and the rear is lowered to the maximum level to make it easy to load and unload the vehicle at the rear.	< 0 km/h

The Ferry function lets you temporarily adjust the ride height at a maximum speed of 30 kilometres an hour. The other functions can only be operated when the vehicle is at a standstill.



VB-FullAir 3C















VB-FullAir 3C is a complete air suspension system on the rear axle and an auxiliary air suspension system on the front axle of the vehicle. 3-Corner indicates that three sensors are fitted: two rear height sensors and one front pressure sensor.



The VB-FullAir 3C system is only available for a limited number of motorhomes with an Iveco Daily chassis. The VB-FullAir 3C system is supplied with the remote control shown opposite. You can use the remote control to easily control various functions of the system.

THE VB-FULLAIR 3C SETS INCLUDE:		VB-FullAir 2C set on the rear axle and auxiliary air suspension system on the front axle
1	Main springs	+
2	Bellows	+
3	Height sensors	+
4	Pressure sensor	+
5	VB-ASCU (control unit)	+
6	Remote control	+
7	Shock absorbers (in most cases)	+
8	Air tank	+
+	Fasteners	+
+	Fitting instructions	+
+	User manual	+
+	Approval documentation	+

VB-FULLAIR 4C - LCV MOTORHOMES

 	AutoLevel – includes a digital levelling function that can be used to set your vehicle level (as far as the spring travel permits).	< 30 km/h
	Sport – lower the level of the vehicle by around 30 mm for better handling and firm chassis adjustment.	< 0 km/h
 	Off Road – increase of around 30 mm for greater ground clearance on rough terrain.	< 30 km/h
 	Car Park – lower the vehicle to virtually the maximum level to make it easier to get in and out. You can also use this function (depending on the original vehicle height) to reduce the ride height in order to enter a car park with a low roof or to drive under a gate.	< 30 km/h
 	Memory function – stored height is activated.	< 0 km/h
 	Manual control to vary the loading/unloading height.	< 0 km/h
	Ferry – the rear is raised to the maximum level, for example to make the vehicle easy to drive onto a ferry.	< 30 km/h
	Water discharge – tilts the vehicle to the side with the water discharge to allow the wastewater tank and the toilet tank to be fully emptied.	< 0 km/h
	Load space – the front axle is automatically raised and the rear is lowered to the maximum level to make it easy to load and unload the vehicle at the rear.	< 0 km/h



The Off Road and Car Park functions let you temporarily adjust the ride height at a maximum speed of 30 kilometres an hour. The Sport function works at all speeds. The other functions can only be operated when the vehicle is at a standstill.

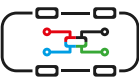


The Ferry, Off Road and Parking functions let you temporarily adjust the ride height at a maximum speed of 30 kilometres an hour. The other functions can only be operated when the vehicle is at a standstill.

EXTENSIVE CONTROL OPTIONS.

VB-FullAir 4C

VB-FullAir 4C is a complete air suspension system on the front and rear axle of the vehicle. 4-Corner indicates that four height sensors are fitted: two on the front axle and two on the rear axle.



The VB-FullAir 4C system is supplied with one of the remote controls shown on the left page. You can use the remote control to easily control all functions of the system.



THE VB-FULLAIR 4C SETS INCLUDE:

		VB-FullAir 4C front and rear axle
1	Bellows	+
2	Main springs	+
3	Shock absorbers	+
4	VB-ASCU (control unit)	+
5	Air tank	+
6	Front legs with bellows	+
7	Height sensors	+
8	Remote control	+
+	Fasteners	+
+	Fitting instructions	+
+	User manual	+
+	Approval documentation	+



**COMPLETE AIR SUSPENSION
SYSTEMS EFFECTIVELY
FILTER UNEVENNESS FROM
THE ROAD SURFACE.**



OPTIONS: ALWAYS CONTINUE TO OPERATE THE AIR SUSPENSION.

The complete air suspension systems from VB-Airsuspension can also be expanded with a number of options. The following options are available for:

- VB-FullAir 2C
- VB-FullAir 3C
- VB-FullAir 4C

Emergency valve kit

The VB-FullAir system can be pressurised by means of filling valves in the event of a possible electronic failure or a defect in the compressor. The vehicle can be brought up to driving height again by means of an external air supply so that the journey can be continued.

'Extra time' module


This module in VB-ASCU ensures that the air suspension remains active for one hour after the ignition is switched off. The vehicle's ignition can therefore be switched off, while all the functions of the air suspension remain active.

Additional switch

This is an additional switch that allows the high/low function of the air suspension to be controlled from a different location in the vehicle, for example at the rear door. The advantage of this is that the driver does not have to walk to the cabin to operate the air suspension.

Software version

A modified software version can be selected depending on the application and use of the vehicle.



WHEN THE VB-FULLAIR 4C IS
LEVELLED, THE CONTROL IS
SWITCHED OFF.

OPTION: FAST AND SMOOTH LEVELLING.

An additional option for our VB-FullAir 4C systems is VB-AutoLevel.

VB-AutoLevel

This module allows the vehicle to be positioned horizontally, even when the vehicle is standing on uneven ground. At the push of a button, the vehicle can be levelled quickly and smoothly. Unevenness of more than 10 cm can be corrected (depending on the type of vehicle). Only suitable for VB-FullAir 4C systems.



In addition to the products from the product group 'full air suspension', we also offer a wide range of other products. Our products fall into one of four product groups. These product groups contain a variety of systems for many different makes and models, meaning that there is always a suitable solution for you.



FULL AIR SUSPENSION



SEMI AIR SUSPENSION



HELPER AND REINFORCED SPRINGS



SPECIAL COMPONENTS



DISCOVER OUR PRODUCT GROUPS.

Semi air suspension

Semi air suspension is a suspension system that helps the existing suspension on the vehicle to correct suspension problems. The auxiliary air suspension system is fitted between the original leaf suspension and the vehicle chassis.

Semi air suspension is available for the vehicle's rear axle.

Helper and reinforced springs

Helper and reinforced springs are suspension systems that support or reinforce the existing suspension system in order to correct a suspension problem. The helper and reinforced springs are either fitted to the existing suspension or replace the original spring suspension. The two systems are available for both the front and rear axle.

Special components

Reinforced stabiliser

A reinforced stabiliser is a solid rod of the same material as the springs. This roll stabiliser supports the existing suspension. The roll stabiliser is added to the existing suspension system and is available for both the front and rear axle.

Reinforced shock absorbers

Reinforced shock absorbers have their own suspension characteristics. They replace the original shock absorbers, thus becoming part of the existing suspension.

Reinforced shock absorbers are available for both the front and rear axle.

VB-FSD technology

VB-FSD shock absorbers use VB-FSD technology (FSD stands for 'Frequency Selective Damping'). The VB-FSD shock absorbers have double damping characteristics. They replace the original shock absorbers and thus become part of the existing suspension. Shock absorbers with VB-FSD technology are available for both the front and rear axle.



**WE MAKE EVERY JOURNEY
A GOOD ONE.**



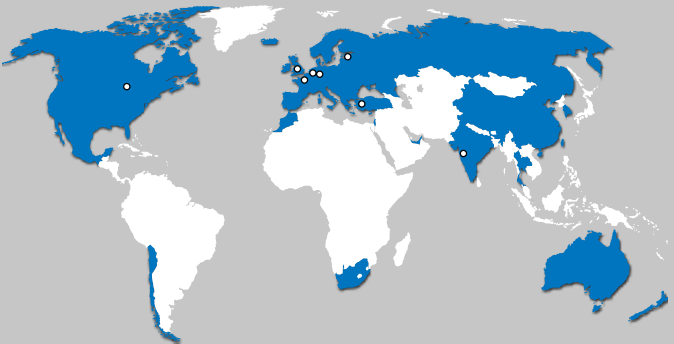
VB-AIRSUSPENSION IS ACTIVE WORLDWIDE.

As a leading company experiencing rapid growth, we want all our customers across the globe to benefit from our premium suspension applications. These suspension applications provide improved comfort, better driving characteristics and improved safety, in turn making every day smoother.

MAKING EVERYDAY SMOOTHER.

According to this motto, we aim to provide our customers with the best possible service – and we've been very successful so far! After all, our highly motivated team has been developing and building suspension applications and various air suspension systems for light commercial vehicles, ambulances, car transporters, motorhomes, 4x4 vehicles and off-road vehicles for more than 25 years. Our product portfolio ranges from reinforced springs to full air suspension solutions with active shock absorbers for front and rear axles. We are especially proud of our official recognition from big names such as Mercedes-Benz, Volkswagen, Ford, Renault, PSA and AL-KO – the highest recognition that an accessory specialist can receive from a vehicle manufacturer. TÜV approvals and 'Letters Of No Objection' (LONO) from various vehicle manufacturers mean that our products are also available for other vehicles.

- MORE THAN 25 YEARS OF EXPERIENCE
- 150 EMPLOYEES
- 7 SUBSIDIARIES WORLDWIDE
- REPRESENTED BY PARTNERS IN 40 COUNTRIES
- DELIVERY TO MORE THAN 60 COUNTRIES
- MORE THAN 225 ACCREDITED INSTALLATION PARTNERS
- MORE THAN 825 TRAINED SPECIALISTS
- MORE THAN 200,000 AIR SUSPENSION SYSTEMS SOLD



DISCOVER OUR PRODUCTS.

Our products find their way to satisfied users through an extensive network of international partners and dealers. Our partners and dealers are authorised specialists that have received extensive training in the installation of our products and in the provision of a high-quality service and appropriate advice.

To find your nearest partner or dealer,
visit www.vbairsuspension.com.