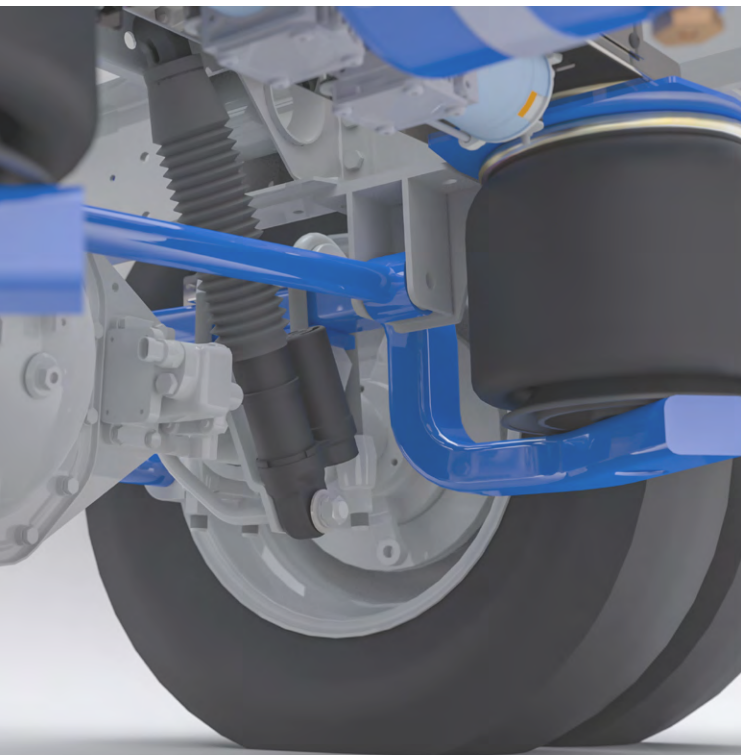


SUSPENSION SYSTEMS

making everyday smoother



airsuspension



DISCOVER THE POSSIBILITIES OF VB-AIRSUSPENSION

BETTER SAFETY AND COMFORT ON THE ROAD.

VB-ActiveAir

Full air suspension with active shock absorbers

THE SYSTEM ADAPTS PERFECTLY TO THE DRIVING SITUATION.



BY MEANS OF ACTIVE DAMPING, YOU CAN RESPOND TO DRIVING SITUATIONS IN REAL TIME.

VB-ActiveAir: VB-FullAir 4C in combination with VB-DynActive

Our VB-ActiveAir system is a combination of a full air suspension system (VB-FullAir 4C) and adaptive shock absorbers (VB-DynActive). This intelligent suspension and shock absorber system adapts in real time to the condition of the road surface, driving characteristics and the load.

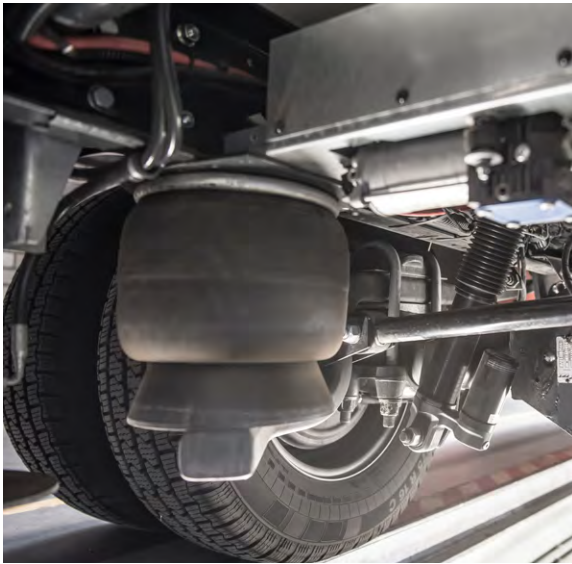
The system ensures better handling as well as a more comfortable and safer trip. The air suspension compensates for varying load states by means of the air pressure in the air springs, and the variable shock absorbers control damping via a valve in the shock absorber. The shock absorbers can be adjusted from minimum damping force to maximum damping force in 6 milliseconds, allowing you to alternate between more sporty handling and a comfortable driving experience as required.

SPORTY, SAFE OR COMFORTABLE. WHY SHOULD YOU HAVE TO CHOOSE?

We believe it's important that the suspension system should adapt to the driver and not the other way round. The system remembers cornering speeds and braking manoeuvres and adjusts the shock absorbers based on your driving style, no matter how the body is configured. So, in Sport mode the ride is automatically made more comfortable when the driver slows down and in Comfort mode the vehicle automatically provides better handling when taking fast bends. The system has three different driving modes (Standard, Comfort and Sport) and can be operated using a switch. Of course, all of the functions of the VB-FullAir 4C system are also available for this system. Two systems: double the benefit!

	Increasing the ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort
VB-ACTIVEAIR*	++ ++	++ ++	++ ++ ++	++ ++ ++
Full air suspension with active shock absorbers				
	Improving driving characteristics	Increasing safety	Improving stability	Minimising fuel consumption
	++ ++ ++	++ ++	++ ++	++ ++

* At present, VB-ActiveAir is only available for motorhomes with an Iveco Daily 60C-70C chassis, as an upgrade kit and as a new kit. The system is under development for a number of vehicle makes and models.



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

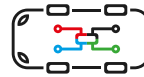
- INCREASED RIDE HEIGHT
- REDUCED OFF-CENTRE LEVEL
- REDUCED VEHICLE ROLL
- IMPROVED SUSPENSION COMFORT
- IMPROVED DRIVING CHARACTERISTICS
- INCREASED SAFETY
- IMPROVED STABILITY
- CONTROL OPTIONS (E.G. VEHICLE CAN BE RAISED/LOWERED)



WHAT IS VB-ACTIVEAIR?

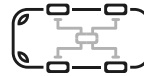
Our VB-ActiveAir system is a combination of a full air suspension system (VB-FullAir 4C) and adaptive shock absorbers (VB-DynActive). This combination offers all the possibilities of the VB-FullAir 4C system in combination with three different driving modes (Standard, Comfort and Sport).

VB-FullAir 4C



+

VB-DynActive



=

VB-ActiveAir = (VB-FullAir + VB-Dynactive)



BENEFITS OF VB-ACTIVEAIR:

- 15% SHORTER BRAKING DISTANCE
- INCREASED STABILITY
- LESS ROLLING RESISTANCE
- THE VEHICLE LEANS LESS
- LESS SIDEWAYS MOVEMENT
- LESS CROSSWIND SENSITIVITY
- UP TO 10 TEN TIMES MORE DAMPING THAN WITH STANDARD SHOCK ABSORBERS
- AUTOMATICALLY ADAPTS TO THE CONDITION OF THE ROAD SURFACE



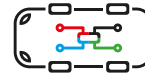
VB-FULLAIR 4C - MOTORHOME

	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	<p>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.</p>
	Ferry – the rear is raised to the maximum level, for example to make the vehicle easy to drive onto a ferry.	< 30 km/h	
	Off Road – increase of around 30 mm for greater ground clearance on rough terrain.	< 30 km/h	
	Parking – 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.	< 0 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.	< 30 km/h	
	Manual control to vary the loading/unloading height.	< 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 RIGHT COMBINATION.

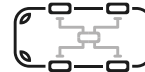
VB-FullAir 4C

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.



VB-DynActive

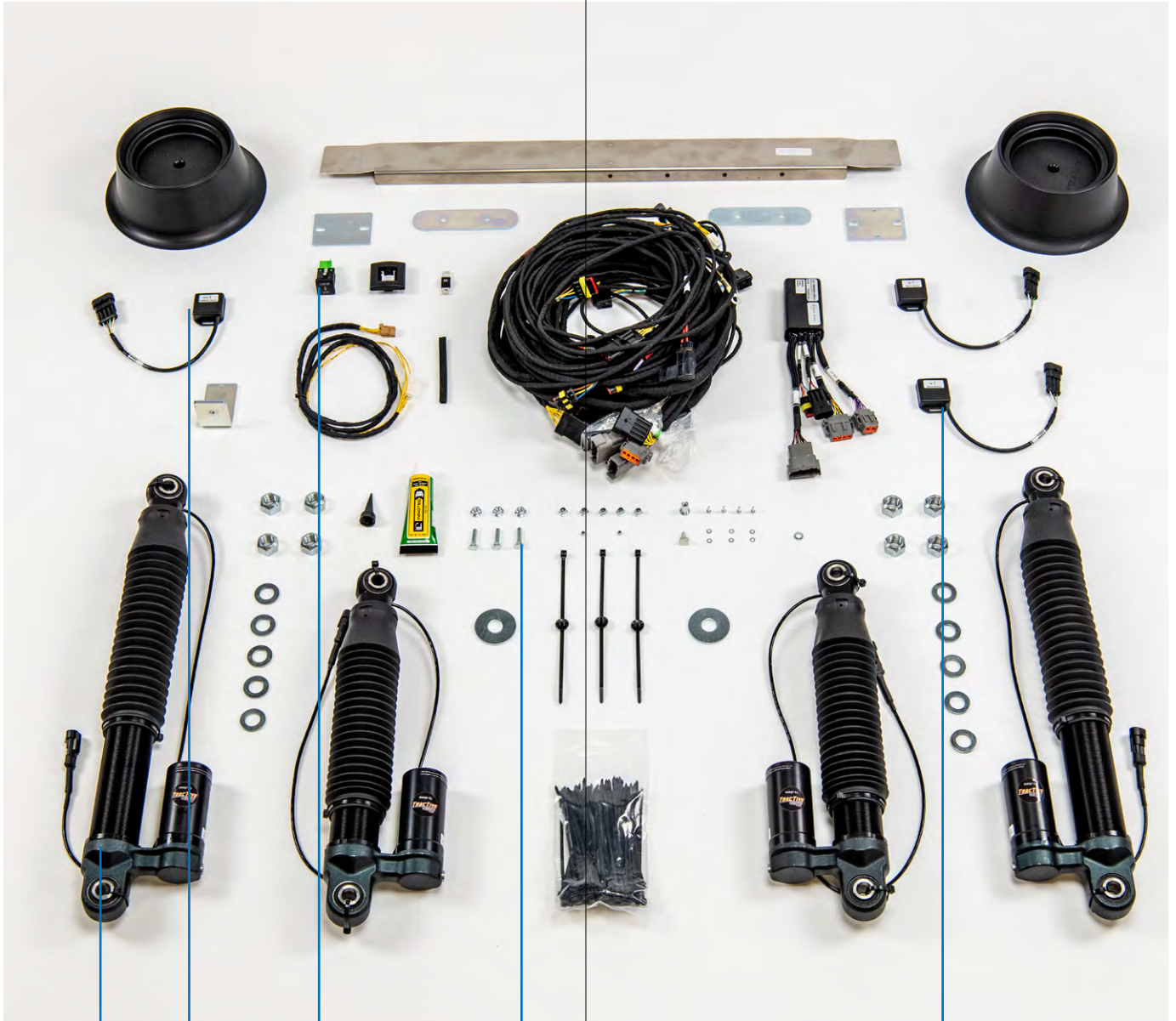
VB-DynActive are active dampers that can be switched from minimum damping force to maximum damping force within 6 milliseconds. This is done with a special valve mounted in the shock absorber.



THE VB-ACTIVEAIR KIT CONSISTS OF:

Set photo VB-DynActive: see pages 8 and 9

1	Active shock absorbers	+
2	Sensor	+
3	Height sensors	+
4	Fasteners	+
5	Switch	+
+	Air springs	+
+	Main springs	+
+	Remote control	+
+	VB-ASCU (control unit)	+
+	Fitting instructions	+
+	User manual	+
+	Approval documentation	+
+	Air tank	+



1

2

5

4

3



ONE MOMENT YOU'RE DRIVING SMOOTHLY OVER AN UNEVEN ROAD SURFACE AND THE NEXT YOU'RE EFFORTLESSLY SWERVING TO AVOID AN OBSTACLE.



EXPAND VB-ACTIVEAIR WITH OUR OPTIONAL EQUIPMENT.

Emergency valve kit

The VB-ActiveAir 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.

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 easily. Unevenness of more than 10 cm can be corrected (depending on the type of vehicle).

In addition to the products from the 'full air suspension' product group, 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.



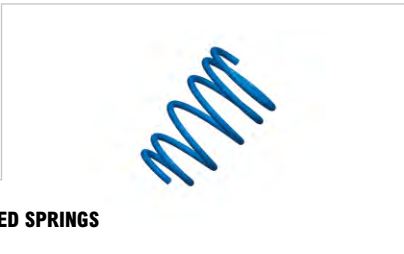
FULL AIR SUSPENSION



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.

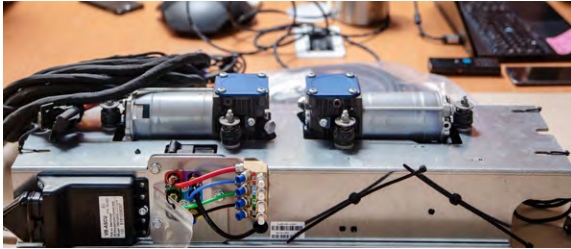
Reinforced shock absorbers

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.



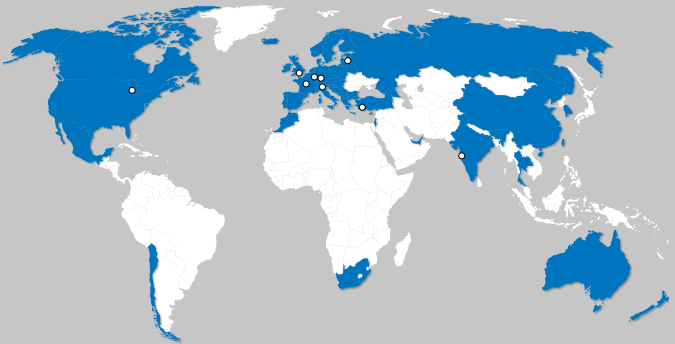
VB-AIRSUSPENSION IS ACTIVE WORLDWIDE.

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 28 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 28 YEARS OF EXPERIENCE
- 150 EMPLOYEES
- 8 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.