

SUSPENSION SYSTEMS

making everyday smoother



**DISCOVER THE POSSIBILITIES OF VB-AIRSUSPENSION,
BETTER SAFETY AND COMFORT ON THE ROAD.**

Product information

Discover our product groups.

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



WHY OPT FOR AIR SUSPENSION?

A good suspension system must provide both spring force and damping, so that the vehicle feels both stable and comfortable to drive. In order to achieve this, each vehicle is fitted with coil spring suspension, leaf suspension or torsion bar suspension and shock absorbers. The suspension under the vehicle ensures that passengers and/or the cargo do not feel every bump in the road surface. The shock absorbers dampen the movement of the suspension; without shock absorbers, the vehicle would continue to pitch and roll.

Air suspension is used when more comfort, stability or height is required and the vehicle's standard suspension is not sufficient. Air suspension is the general term used to describe suspension systems that (partially) run on air. Our innovative air suspension systems and suspension applications help to ensure optimum ride comfort, increased stability and greater safety, so that you can enjoy a safe and worry-free journey.



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

THE BEST SOLUTION FOR SUSPENSION PROBLEMS.

VB-NivoAir: full air suspension

VB-NivoAir is a non-adjustable solution for suspension problems and was specially developed for vehicles fitted with coil spring suspension. The existing coil spring suspension is replaced with a full air suspension system. The VB-NivoAir system ensures that the vehicle always remains at the same ride height. In contrast to VB-FullAir systems, this system cannot be adjusted, meaning that it is not possible to raise or lower the vehicle yourself.

VB-FullAir: full air suspension with advanced control options

VB-FullAir is an automatic, adjustable solution for suspension problems. The existing leaf- or coil spring suspension is fully replaced by a full air suspension system that filters out unevenness in the road surface, thereby increasing ride comfort. The driveability and stability of the vehicle are improved, which in turn increases safety. VB-FullAir is supplied with a sophisticated remote control that can be used to easily operate all functions of the suspension system. Depending on the make and model of vehicle, full air suspension is available for both the front and rear axle.

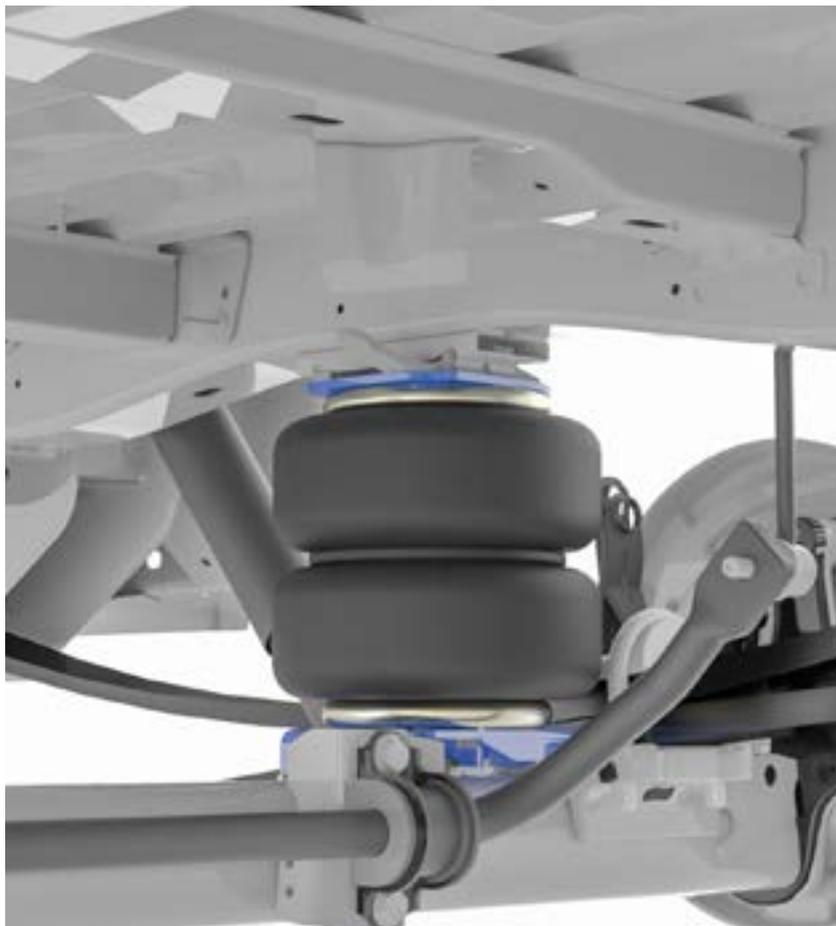
VB-ActiveAir: full air suspension with active shock absorbers

VB-ActiveAir 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 ride comfort and a safer trip.

	Increasing the ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort	Improving driving characteristics	Increasing safety	Improving stability	Control options
VB-NIVOAIR Full air suspension	++	++	++	++	+-	+	+	
VB-FULLAIR Full air suspension	++	+++	++	++	++	+	+	++
VB-ACTIVEAIR* Full air suspension and active shock absorbers	++	++	+++	+++	+++	++	++	+++

* 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 in development for a number of vehicle makes and models.

THE SEMI AIR SUSPENSION CAN BE FITTED QUICKLY THANKS TO OUR "PLUG-AND-PLAY" SYSTEM. IT ALSO ENSURES A HIGHER RIDE HEIGHT AND VARIABLE SPRING FORCE.



CREATE MORE SPRING TRAVEL WITH SEMI AIR SUSPENSION.

VB-SemiAir: semi air suspension

Semi air suspension, also known as VB-SemiAir, supports the vehicle's existing suspension and is often used in vehicles that frequently carry heavy loads. An air spring is fitted between the chassis and the rear axle, which raises the ride height of the vehicle and generates greater spring travel. The VB-SemiAir therefore helps to increase the level of comfort and stability when travelling in your vehicle.

The system enables the suspension to be adjusted (manually) within specific limits. VB-SemiAir is supplied as a two-chamber system. This means that the air springs are not connected to each other. The use of a two-chamber system allows left and right to be adjusted separately, enabling the vehicle to be levelled even when it is loaded unevenly.

VB-LevelAir: semi air suspension system with automatic level control

VB-LevelAir is a VB-SemiAir basic system with automatic level control. The system provides for greater ease of use: there is no need for the driver to worry about operating the system while out making deliveries. This prevents incorrect or improper use. VB-LevelAir ensures the vehicle is always at the correct ride height and that the system is at the right pressure. The rear of the vehicle leans less when loaded, which improves stability and driveability, so it contributes to enhanced safety whenever you are driving.

	Increasing ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort	Improving driving characteristics	Automatic adjustment
VB-SEMIAIR Semi air suspension	++	++	+	+	+	
VB-LEVELAIR Semi air suspension (automatic level control)	++	++	+	+	+	+

OUR SUSPENSION APPLICATIONS
ALLOW FOR STABLE DRIVING AT THE
ORIGINAL RIDE HEIGHT.

IMPROVED DRIVING CHARACTERISTICS THANKS TO SUSPENSION APPLICATIONS.

VB-CoilSpring: helper or reinforced springs

In addition to full air suspension and semi air suspension, we also supply helper and reinforced springs for a number of vehicles that support or reinforce the existing suspension in the vehicle. The helper and reinforced springs, also known as VB-CoilSpring, are either fitted to the existing leaf suspension/coil spring suspension or replace the original coil spring suspension. The VB-CoilSpring returns the vehicle to the original (or a higher) ride height, increasing stability and, to a certain extent, the level of comfort. The VB-CoilSpring is a good option for vehicles that are always heavily laden. This is because the reinforcement to the spring force is permanent and cannot be adjusted. The two systems are available for both the front and rear axle.

	Increasing ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort	Improving driving characteristics
VB-COILSPRING Helper and reinforced springs	++	+	++	+	+

OUR AIR SUSPENSION SYSTEMS OR SUSPENSION APPLICATIONS HELP TO ENSURE A RELIABLE AND PLEASANT JOURNEY IN YOUR VEHICLE.



THE RIGHT SUPPORT FOR EVERY SITUATION.

Reinforced stabilisers

The effect of a roll stabiliser is such that vertical movements in one wheel are reproduced (to a lesser degree) by the same wheel on the other side of the vehicle. This reduces leaning of the body in bends as well as crosswind sensitivity. The installation of a (reinforced) stabiliser is mainly recommended on vehicles with a high centre of gravity.

Reinforced shock absorbers

The installation of reinforced shock absorbers helps to absorb vehicle movements in relation to the road surface more effectively. The vehicle returns to the correct ride height after each movement. Vehicles with softer suspension are usually considered to be more comfortable, but often have unstable road contact. The installation of reinforced shock absorbers improves the stability and therefore is good for the vehicle too.

	Increasing ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort	Improving driving characteristics
REINFORCED STABILISERS VB-SpecialParts		++	++		+
REINFORCED SHOCK ABSORBERS VB-SpecialParts			+	+	+



STABILITY AND COMFORT – A STANDARD SHOCK ABSORBER WILL ONLY EXHIBIT ONE OF THESE CHARACTERISTICS. THE VB-FSD SHOCK ABSORBER OFFERS BOTH THESE CHARACTERISTICS, THUS ENABLING A SAFER RIDE.

STABILITY AND COMFORT.

VB-FSDshockabsorber

FSD stands for 'frequency selective damping'. The addition of a special valve allows the shock absorber with FSD technology to vary its own damping force. This directly results in more comfortable driving characteristics, improved stability, greater safety and less vibration and background noise, since unevenness in the road surface is not felt as distinctly in the vehicle. Our VB-FSD shock absorber is a shock absorber for both the front and the rear axle that has been specifically developed to improve vehicle behaviour.

VB-FSDstrut

The VB-FSD strut is a suspension strut specifically developed for motorhomes with an X250/X290 chassis (Peugeot Boxer, Fiat Ducato, Citroën Jumper). The suspension strut consists of an VB-FSDshockabsorber and a special coil spring of ours (VB-CoilSpring). The VB-FSD strut makes the vehicle stand higher at the front, prevents it sagging as much and creates more spring travel so that unevenness in the road surface is better absorbed. Combining these two FSD technologies gives you the 'VB Suspension Upgrade Kit'. This kit offers the best in comfort and stability in this class on both the front and rear axle.

	Increasing ride height	Minimising sagging	Reducing vehicle roll	Improving suspension comfort	Improving driving characteristics
VB-FSDSHOCKABSORBER* VB-FSD technology			++	++	++
VB-FSDSTRUT** VB-FSD technology	++	+	++	++	++
VB SUSPENSION UPGRADE KIT*** VB-FSD technology	++	+	+++	+++	+++

* The VB-FSD shock absorber is a shock absorber for both the front and rear axle.

** The VB-FSD strut is a combination of a VB-FSD shock absorber and VB-CoilSpring for the front axle. It is only available for a PFC X250/X290 chassis.

*** The VB Suspension Upgrade Kit is a combination of a VB-FSD strut on the front axle and a VB-FSD shock absorber on the rear axle. It has been specifically developed for motorhomes with a PFC X250/X290 chassis.



WE MAKE EVERY JOURNEY A
GOOD ONE.



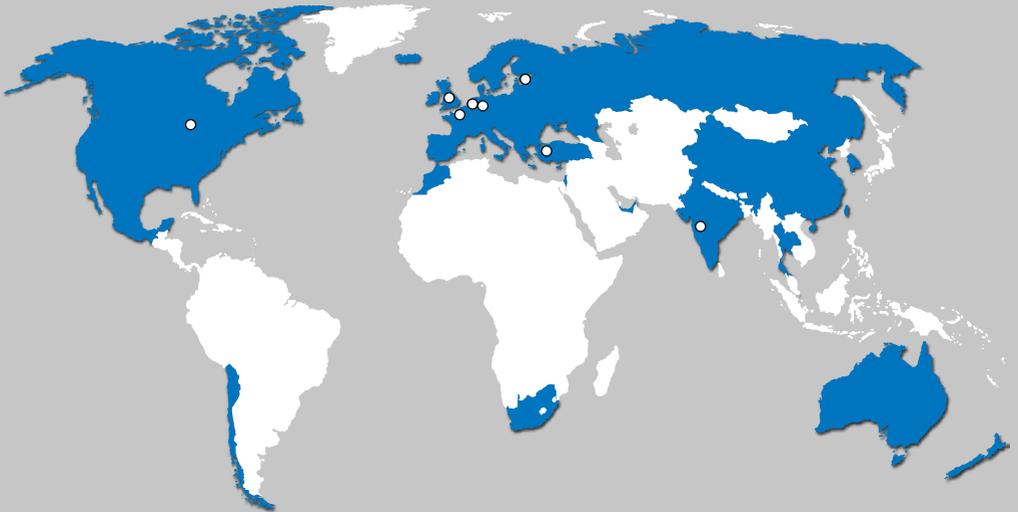
VB-AIRSUSPENSION IS ACTIVE WORLDWIDE.

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 for improved comfort, better driving characteristics and increased 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! With the help of a motivated team, we have 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 the front and rear axle. We are especially proud of our official recognition from big names such as Mercedes-Benz, Volkswagen, Ford and Renault – this is 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' EXPERIENCE
- 150 EMPLOYEES
- 7 SUBSIDIARIES WORLDWIDE
- REPRESENTED BY PARTNERS IN 40 COUNTRIES
- SUPPLYING TO MORE THAN 60 COUNTRIES
- MORE THAN 225 ACCREDITED INSTALLATION PARTNERS
- MORE THAN 825 TRAINED SPECIALISTS
- AROUND 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.