

# SUSPENSION SYSTEMS

making everyday smoother



airsuspension



**VB SUSPENSION UPGRADE KIT FOR MOTORHOMES**

**FOR INCREASED COMFORT AND GREATER STABILITY!**

## **VB-FSD technology**

**Special components - VB-FSDstrut & VB-FSDshockabsorber**



A GOOD START IS HALF THE BATTLE.



Travelling by motorhome opens up new worlds. You just set off into the sunset: there's no need to think about where you'll be spending the night, as you have a place to sleep wherever you go. A motorhome is the perfect choice, whether you are going away for the weekend, a two-week holiday or spending a few months on the road. If you are travelling hundreds of miles at a time in your motorhome, stability and comfort are essential, so it is extremely important that the suspension system is in a sound condition. 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.

## FOR INCREASED COMFORT AND GREATER STABILITY.

Many motorhomes are based on a Citroën Jumper, Fiat Ducato or Peugeot Boxer with a PFC X250/X290 chassis (year of manufacture 2006 to date). The original suspension system for these vehicles was fundamentally designed for light commercial vehicles and not for motorhomes.

OUR SUSPENSION SYSTEMS PROVIDE FOR MORE STABLE ROAD HANDLING.

Practical experience demonstrates that the original springs and shock absorbers often struggle to cope with the increased weight of a motorhome. As a result, the spring travel is reduced and the bump stops/end stops are reached more quickly, resulting in uncomfortable and unstable driving characteristics. So, there is undoubtedly plenty of scope for improvement.

The following problems can be resolved using the 'VB suspension upgrade kit for motorhomes' (VB-FSDstrut and VB-FSDshockabsorbers).

### PROBLEMS YOU MAY BE EXPERIENCING WITH YOUR MOTORHOME:

- SUSPENSION DRIFT
- UNCOMFORTABLE DRIVING CHARACTERISTICS
- VEHICLE INSTABILITY
- SAGGING OF THE BODY
- UNEVENNESS IN THE ROAD SURFACE DISTINCTLY FELT IN THE VEHICLE
- VIBRATION IN THE CHASSIS
- BACKGROUND NOISE (BUMPS) IN THE CHASSIS
- BACKGROUND NOISE (CREAKING) IN THE VEHICLE BODY

## A NEW SOLUTION FOR SUSPENSION PROBLEMS.

### **VB-FSDstrut**

The VB-FSDstrut is a complete suspension strut specifically developed for motorhomes with an X250/X290 chassis. The suspension strut has a shock absorber with patented 'FSD technology' and a special coil spring from VB-Airsuspension (VB-CoilSpring). The VB-FSDstrut makes the vehicle stand higher at the front. This enables greater spring travel, and unevenness in the road surface can be better absorbed. The position depends on the type of VB-CoilSpring and the actual weight on the front of the vehicle. The VB-FSDstrut provides for more stable and comfortable vehicle driving characteristics.

THE RIGHT COMBINATION.

### **VB-FSDshockabsorber**

The VB-FSDshockabsorber is a shock absorber for the rear axle that has been specifically developed to improve the vehicle behaviour of motorhomes with a PFC X250/X290 chassis (year of manufacture 2006 to date). Fitting these shock absorbers makes the vehicle driving characteristics more stable, and unevenness in the road surface is better absorbed.



VB-AIRSUSPENSION HAS MANY YEARS OF EXPERIENCE WITH SHOCK ABSORBERS THAT APPLY 'FSD TECHNOLOGY' AND, THROUGHOUT THIS TIME, HAS SOLD THOUSANDS OF REINFORCED FRONT SPRINGS.



FSD stands for '**frequency selective damping**'. With standard shock absorbers you usually have to make a choice between stability and comfort. If you go for more stability, the vehicle will feel more stable, but will not provide as much comfort. If you go for comfort, the vehicle will be comfortable to drive, but will not feel as stable. Clearly, it's best to have both.

## WHICH DO YOU PREFER - MORE COMFORT OR MORE STABILITY?

The solution is simple: with our 'VB suspension upgrade kit for motorhomes' you don't have to choose any more! This kit makes achieving both increased comfort and more stability a simple matter. When you fit shock absorbers with 'FSD technology' to your vehicle, you no longer need to choose either one or the other. The addition of a special valve allows the shock absorber to vary its own damping force. This immediately results in better vehicle behaviour in terms of comfort and stability.

THE BEST IN THIS CLASS.

A combination of top-performing reinforced front springs from VB-Airsuspension and shock absorbers that apply FSD technology make up the 'VB suspension upgrade kit for your motorhome'. This kit offers the best in comfort and stability in this class.

The 'upgrade kit' is available as a kit for the front and rear axles, but is also available for individual axles.

### ADVANTAGES OF THE 'VB SUSPENSION UPGRADE KIT FOR MOTORHOMES':

- SUSPENSION SYSTEM DOES NOT DRIFT AS QUICKLY
- MORE COMFORTABLE DRIVING CHARACTERISTICS
- IMPROVED STABILITY
- VEHICLE DOES NOT SAG
- UNEVENNESS IN THE ROAD SURFACE NOT FELT SO DISTINCTLY IN THE VEHICLE
- LESS VIBRATION
- LESS BACKGROUND NOISE

In addition to the products from the 'special components' 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.



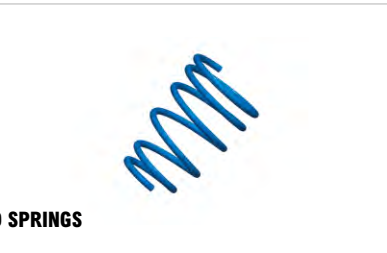
**FULL AIR SUSPENSION**



**SEMI AIR SUSPENSION**



**HELPER AND REINFORCED SPRINGS**



**SPECIAL COMPONENTS**



## DISCOVER OUR PRODUCT GROUPS.

### Full air suspension

Full air suspension is an automatic, adjustable solution to a suspension problem where the existing suspension is replaced by a full air suspension system. Depending on the make and model of vehicle, full air suspension is available for both the front and rear axle.

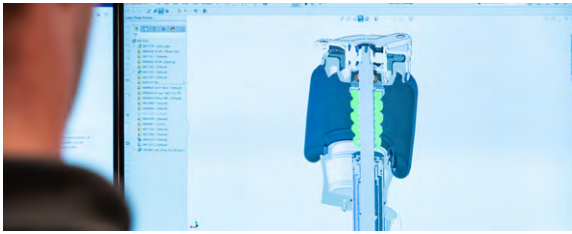
### Semi air suspension

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.





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



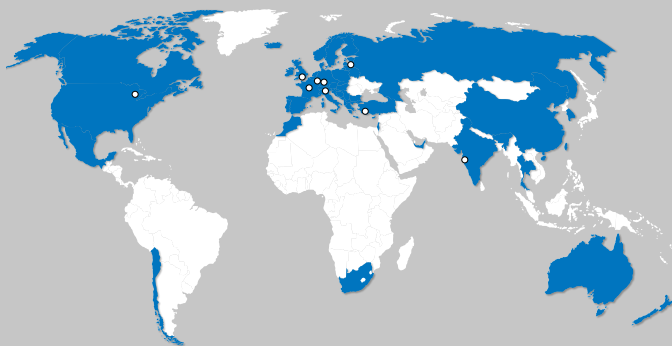
## **VB-AIRSUSPENSION IS ACTIVE WORLDWIDE.**

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](http://www.vbairsuspension.com).