

# SUSPENSION SYSTEMS

making everyday smoother



**DAD, ARE WE EVER  
GOING TO SET OFF?**

**VB-ActiveAir**



IGINIO VOORHORST IS ALWAYS ON THE LOOKOUT FOR NEW IDEAS AND INNOVATIVE TECHNOLOGY. OUR VB-ACTIVEAIR IS THE BEST EXAMPLE OF THIS.

# ARE YOU STILL DRIVING OR ARE YOU FLOATING?

“Dad, are we ever going to set off?” is the title of this brochure. The ride comfort with the new VB-ActiveAir is so good that the children haven’t even realised that their father has already started driving. Admittedly, we haven’t quite got that far yet, but I promise you:

**AFTER THE CONVERSION, YOU WON’T EVEN RECOGNISE YOUR MOTORHOME ANYMORE!**

No doubt you’re wondering what exactly it is about this suspension that I’m raving about. With the VB-ActiveAir, we have combined the proven VB-FullAir 4C full air suspension with our new adaptive VB-DynActive shock absorbers to create the best suspension that you have ever had in a motorhome.

We’ll explain why that is and how it works on the following pages.

Iginio Voorhorst

Chief Executive Officer of the VB Group (CEO)

# SPORTY, SAFE OR COMFORTABLE. WHY NOT ALL THREE?

Up to now, a suspension has always been a compromise. High spring rates and strong damping ensure excellent driving safety, maximum road contact and large vehicle load reserves, but impair ride comfort. A soft suspension filters surface unevenness well, but at the expense of driving stability and responsiveness.

**AS ALREADY STATED: SUSPENSION HAS ALWAYS BEEN A COMPROMISE**

But with the new VB-ActiveAir, this has become a thing of the past. The air suspension compensates for varying load states using the air pressure in the bellows and the variable shock absorbers adjust the damping force via a valve in the shock absorber. Entirely automatically or manually – the choice is yours.

- + VARIABLE DAMPING FORCE IN COMPRESSION AND REBOUND
- + UP TO 10X HIGHER DAMPING FORCE COMPARED TO STANDARD EQUIPMENT
- + FROM SPORTY AND FIRM TO SOFT AND COMFORTABLE
- + 3 DRIVING MODES (COMFORT, STANDARD, SPORT)
- + 7 SENSORS TO DETECT BODY MOVEMENTS AND THE ROAD CONDITION
- + AUTOMATICALLY ADAPTS TO THE ROAD CONDITIONS
- + RESPONSE TIME OF JUST 6 MS

**THIS SHOCK ABSORBER ENSURES THAT YOUR MOTORHOME IS MORE COMFORTABLE AND SAFER, TILTS LESS AND NO LONGER VIBRATES.**





WHETHER THERE'S A POT HOLE OR  
A SPEED BUMP, OUR NEW  
VB-ACTIVEAIR RESPONDS IN  
A FRACTION OF A SECOND AND  
ADAPTS TO EVERY DRIVING SITUATION  
IN THE BEST POSSIBLE WAY.

# WE MAKE EVERY ROAD A GOOD ROAD.

Anyone covering hundreds of kilometres at a time in their motorhome needs maximum ride comfort. With conventional suspension that's difficult, as the springs and dampers are just as strong when driving straight ahead in a relaxed manner and with an empty vehicle as they are when making an evasive manoeuvre at high speed with lots of luggage on board.

## THE SKILL LIES IN BEING ABLE TO ADAPT PERFECTLY TO THE DRIVING SITUATION

The new VB-ActiveAir can achieve this. Within a mere 6 milliseconds, the shock absorbers can be adjusted from the minimum to the maximum damping force. This means the VB-ActiveAir can be both sporty and comfortable. One moment you glide softly over uneven surfaces, the next you expertly avoid an obstacle.

- + SMOOTH RESPONSE OF THE SUSPENSION
- + EXCELLENT RIDE COMFORT
- + SIGNIFICANTLY REDUCED BODY MOVEMENTS
- + AUTOMATICALLY ADAPTS TO THE ROAD CONDITIONS



# ON A GREAT JOURNEY WITH A SPORTY VEHICLE.

Motorhomes are not exactly built for winding roads. This makes it all the more impressive how nimbly, expertly and safely they tackle the slalom course with our VB-ActiveAir.

## ALWAYS READY FOR THE NEXT CORNER

With its sophisticated sensors, the system detects immediately if your vehicle is tilting towards the right in a left turn, for example. The shock absorbers react within a mere 6 ms, increasing the damping force of the compression stage on the right-hand side and that of the rebound stage on the left-hand side. Your motorhome therefore compresses less on the right, extends less on the left and therefore steers straight and true through the corner. It all sounds quite complicated, but works fantastically. That's a promise.

WE DON'T PROMISE ANYTHING WE CAN'T DELIVER. THAT'S WHY WE'VE TESTED THE VB-ACTIVEAIR OVER SEVERAL THOUSAND KILOMETRES.



- + 15% SHORTER BRAKING DISTANCE
- + INCREASED DRIVING STABILITY
- + LESS SIDE TILT
- + FEWER PITCHING AND ROLLING MOTIONS
- + REDUCED CROSSWIND SENSITIVITY
- + NO VIBRATION

THE VB-ACTIVEAIR IS OPERATED  
USING A SWITCH  
ON THE DASHBOARD.  
AN APP FOR SMARTPHONES WILL  
ALSO BE AVAILABLE SOON.



## THE VB-ACTIVEAIR THINKS FOR ITSELF. IN ANY SITUATION.

We think the suspension should adapt to the driver and not the other way round. This is why our VB-ActiveAir is not completely idle when one of the three driving modes, Comfort, Sport or Standard, has been selected.

### A SUSPENSION THAT LEARNS FROM ITS DRIVER

Regardless of how the suspension is set, our system remembers cornering speeds and braking manoeuvres, and deduces the optimum setting for the shock absorbers depending on your driving style. For example, if driving moderately in the Sport setting, the ride automatically becomes a little more comfortable. And when taking corners rapidly in the Comfort setting, it automatically becomes a little more sporty.

- + EASY TO OPERATE
- + PRECISE ANALYSIS OF THE DRIVING STYLE
- + ADAPTS AUTOMATICALLY
- + ALWAYS THE IDEAL SETUP



# MORE STABLE THAN ANY OTHER SUSPENSION.

Our VB-ActiveAir system is not only fun to use while driving, but also at a standstill. As soon as the vehicle stops and the engine is switched off, the valve in the damper closes and increases the damping force approximately tenfold.

## THE VB-ACTIVEAIR IS AN INTERESTING ALTERNATIVE TO JACKS

Of course, you don't get quite the same stationary comfort as an expensive jack system, as the tyre remains a spring element. But in combination with the automatic ride-height compensation of the air suspension, we achieve stationary comfort that leaves nothing to be desired for most motorhome enthusiasts.

- + NO WOBBLING AT A STANDSTILL
- + THE VEHICLE STAYS EVEN AUTOMATICALLY
- + HIGH DEGREE OF LEVEL COMPENSATION
- + SIGNIFICANTLY INCREASED STATIONARY COMFORT



# 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, making every day smoother.

## MAKING EVERYDAY SMOOTHER

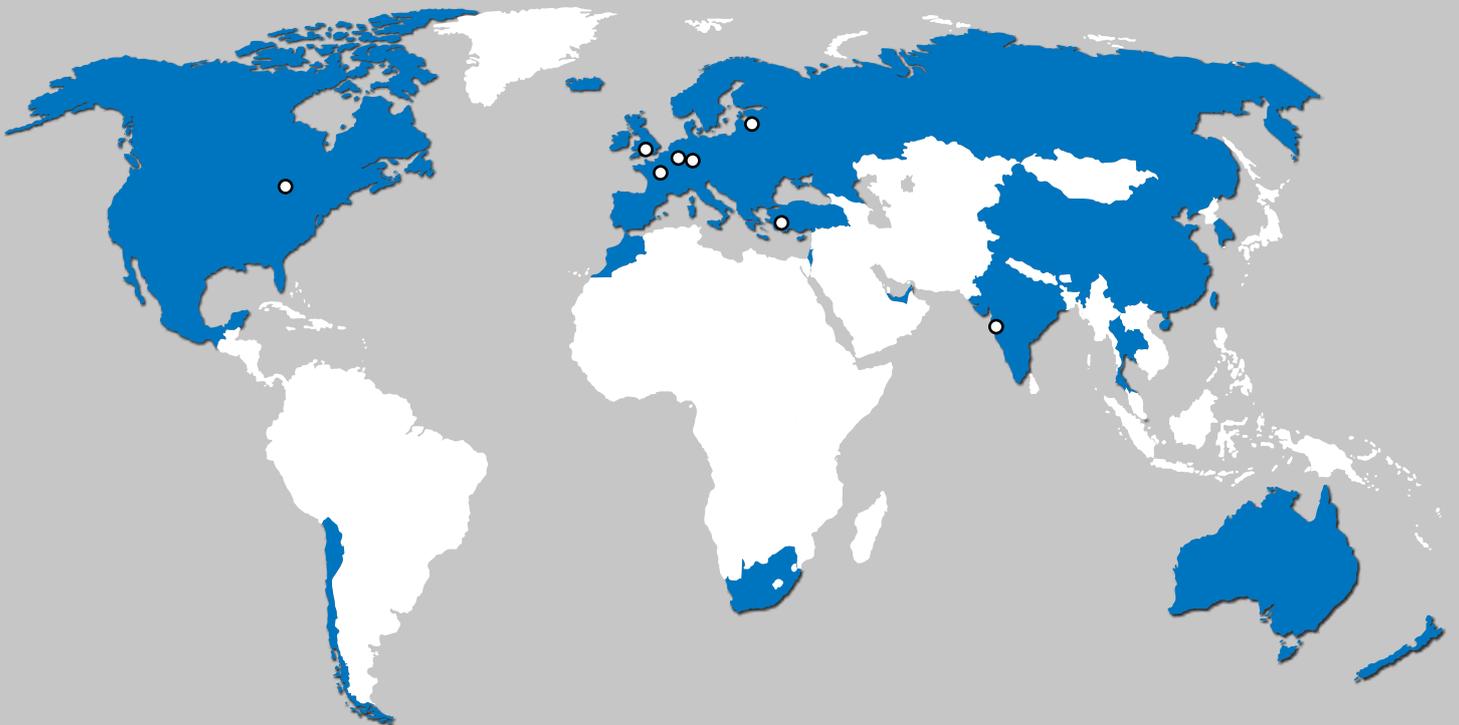
According to this motto, we aim to provide our customers with the best possible service – and we've been very successful so far! With the help of a motivated team, we have been developing and building suspension applications and various air suspension systems for light commercial vehicles, ambulances, car transporters, motorhomes, 4x4 vehicles and off-road vehicles for almost 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) mean that our products are also available for a number of other vehicles.

- + 25 YEARS OF EXPERIENCE
- + 120 EMPLOYEES
- + 7 SUBSIDIARIES WORLDWIDE
- + REPRESENTED IN MORE THAN 60 COUNTRIES
- + 35 PARTNERS
- + OVER 750 TRAINED SPECIALISTS
- + OVER 200 INSTALLATION PARTNERS
- + ROUGHLY 150,000 AIR SUSPENSION SYSTEMS SOLD



WE MAKE EVERY JOURNEY  
A GOOD ONE.





## 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).

