

- ***Air-suspension***



## General information VB-FullAir

### Full air-suspension offers the following advantages:

#### A constant ride-height

The electronic system ensures that, independent of the load, the vehicle will always have the ride-height set by VB-Airsuspension. The rear end of the vehicle will not lower due to heavy load. Plus, the constant ride-height has a positive influence on the fuel consumption.

To ensure that the brake pressure corresponds with the load of the vehicle, a LSV-unit (only used when the vehicle is equipped with a LSV) is used to regulate the brake pressure depending on the pressure in the bellows.

#### Adjustable floor height

The air-suspension system is standard equipped with a raise and lower switch. This switch offers the opportunity (when the parking-brake is used) to change the height of the rear of the vehicle to ease (un)loading of the vehicle or to ease (de)coupling of a trailer.

#### Improved road handling

Applying an air-suspension system in most cases requires a modification of the shock absorbers. Almost every air-suspension system comes with specific shock absorbers to improve the vehicle's road handling and straight-ahead running. This will also reduce tyre wear-off.

#### Improved stability

Due to the unique VB-Airsuspension construction, every air-suspension system has its own integrated stabiliser. This improves the vehicle's stability and offers the driver the a safer feeling.

#### Better comfort

The air-suspension system more or less filters the unevenness of the road so the passengers are subjected to less energy (vibrations). This increases comfort and reduces fatigue. That is why more and more car manufacturers equip their vehicles with air-suspension.

### Versions (\*):

#### Light

This version is only advised when extra comfort is required and the maximum rear axle load is less than 80 per cent of the maximum permissible rear axle load. This light version is mainly used for taxi buses (wheelchair transportation) or the transportation of light/ fragile goods.

#### Medium

This is the most suited version for average use of the vehicle. It offers a good comfort combined with the possibility to use the vehicle's maximum load capacity.

#### Heavy

The heavy version is advised when there is a possibility that the rear axle load is exceeded occasionally. This version is recommended for car transporters, mini tractors and vehicles equipped with a loading platform.

Warning: Overloading the rear axle is **not** permitted. Please follow the car manufacturer instructions.

(\*) depending on the vehicle type

## Options:

### ECU-adapter

The ECU-adapter ensures that only the air required for lowering the vehicle is blown off. This means that when the chassis (or another part) rests on the bump stop, the ECU-adapter stops blowing off the air from the bellows. The remaining air in the bellows makes the vehicle raise faster. This option also provides the possibility to operate the air suspension for one hour after the ignition has been turned off (e.g. to prevent car-jacking).

### Emergency valve

With this application an external air-supply can add extra air to the system, may it cease for any reason.

## The conversion to full air suspension comprehends:

- Disassembly of the existing leaf or coil spring components\*.
- Assembly of the VB-Airsuspension air-suspension system. Contents: main leaves arms\*, reaction brackets, Panhard rod\*, shock absorbers\*, pneumatic components (e.g. bellows, pistons, compressor, air dryer, air tubes, and LSV-unit), electronic components (e.g. height sensor, ECU, dashboard switch and wiring harness), various fastening materials and a modified LSV-plate. All metal components are covered with a corrosion inhibitor.
- At delivery of a kit all of the documents (e.g. an extensive manual, guarantee form and a manual for in the vehicle) needed for an accurate and reliable assembly and use is supplied.
- When assembled at VB-Airsuspension or at one of VB's authorized dealers the vehicle will be finished ready for use, if necessary provided with the needed inspection and inspection papers.

(\*) depending on the vehicle type

The technical specifications are the standard VB-Airsuspension versions. Other specifications are on request.

VB-Airsuspension reserves the right to make changes without prior notification.

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