

## Carsupport auxiliary spring kit for AL-KO chassis The solution for motorhomes with overloaded torsion springs

Motorhomes are becoming heavier and heavier. In the design this is underestimated. A motorhome that is sagging or leaning has poor drive properties. The car springs have not enough travel to compensate bad road conditions. This causes the feared 'bottoming' and is uncomfortable and unsafe. Even when driving carefully, exhaust pipe, water tank, spare wheel rack, etc. can be damaged. Especially the long rear end can hit the ground by steep slopes (e.g. embarking ferries)

### Fortunately there is a perfect technical solution available now

CARSUPPORT, (for 35 years, the leading Dutch manufacturer of automotive spring systems), has developed a very effective and comfortable, auxiliary **steel spring kit** especially for the AL-KO chassis.



How it works: this auxiliary or helper spring kit has two specially designed brackets, fitted on the AL-KO chassis and suspension arm. Two very long steel coil springs of 350/380mm length are placed in between. Because of the small outside diameter of just  $\pm 100\text{mm}$ , wheel spacers are not needed. The CARSUPPORT kit delivers per axle a dynamic, extra spring force from 400–1500kg. These high forces are achieved by the **very long spring travel**, while the spring rate is relatively low. So the motorhome **stays comfortable**. The motorhome **raises 35-55mm** at the wheel arch and **55-85mm at the rear end**, depending on the chosen springs and type of motorhome. The kit is available in a Heavy Duty (HD) and an Extra Heavy Duty (EHD) version. For a motorhome that leans to one side, these versions can be mixed per axle, for a **permanent correction**.

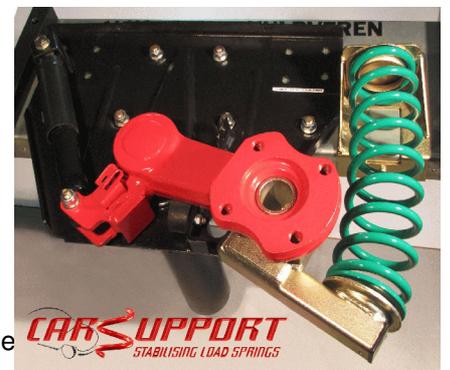


### The advantages:

- Extra spring travel prevents severe bouncing on bump stops. Safer and more comfortable
- More space under the vehicle, so less chance of damage.
- Enormous improvement in road holding and stability. More grip for the front wheel drive.
- Relieves the AL-KO axle by approx 30%, increasing lifetime tremendously.
- Even with heavy loads, like a motorcycle on the rear, the motorhome will not be a problem. Heavy loads are less visible (do not exceed the permitted maximum load).

### Extra advantages over air springs:

- Air springs are only really useful when the load varies strongly. This is rarely the case with motorhomes! They are permanently (too) heavy.
- With the same lift comfort is similar, however steel springs have a **better anti-roll** function (also when the air springs have separated filling).
- Steel coil springs are much more robust and need no maintenance or filling up. The height correction is permanent. The maximum force is restricted, no damage through operational mistakes.
- Because our steel springs have a smaller diameter than air springs, no wheel-spacers are needed. No overloaded wheel bearings and no problems with tire changes.
- Our steel aux. spring kit can be fitted quickly and without drilling or welding to the chassis
- Our kit can almost always be fitted safely, even when air springs are technically not possible
- Also: **very economical in purchase and fitting**.



### 5 years warranty on material , 100% CUSTOMER SATISFACTION only very positive reactions

Motorhome model	Year	Lift HD-kit		Lift EHD-kit		Kit price incl. VAT excl. fitting	Fitting rough guide in hours
		wheel arch in cm	rear end in cm	wheel arch in cm	rear end in cm		
Ducato, C25, J5 <i>on request</i>	'94	3-4	4,5-6	4-5,5	6-8,5	€ 598,-	4-5
Ducato, Jumper, Boxer type 230	'94-'00	3-4	4,5-6	4-5,5	6-8,5	€ 550,-	3-4
Ducato, Jumper, Boxer type 230/244	'00-'06	2,5-3,5	4-5,5	3,5-5	5,5-7,5	€ 598,-	4-5
Ducato, Jumper, Boxer type 250	'06-	2,5-3,5	4-5,5	3,5-5	5,5-7,5	€ 598,-	4-5
Renault Master	'03-	2,5-3,5	4-5,5	3,5-5	5,5-7,5	€ 598,-	4-5
VW Karmann Colorado +TI	'05-	2,5-3,5	4-5,5	3,5-5	5,5-7,5	€ 598,-	3-4

\* Also available for models with **tandem axle** and Fiat Ducato (Citr.C25, Peug.J5, Talbot Express) from **before 1994**.

\* **Leaf springs:** since many years we have steel aux. springs for motorhomes with leaf springs.

\* **Front side:** with our special replacement springs the front raises 4-6cm without loss of comfort. See leaflet.

Carsupport can change prices, products or applications without prior notice. Errors excepted.

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