

# AL-KO *amc*-Handbook for vehicles on AL-KO *amc*-Chassis

**AL-KO**  
Vehicle Technology

**AL-KO *amc***  
Motorhome-Chassis  
**Service**



## AL-KO *amc* (Single/Tandem Axle)



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### From Swabia around the world

AL-KO's success story began in 1931 when Alois Kober founded a locksmith's in Kötz in Swabia, Germany. Handbrake cables were manufactured in series production as early as 1952. AL-KO manufactures the first tested overrun braking device in Germany. From 1961 the company started foreign subsidiaries, in order to be nearer to the market and to serve customers better locally.

Austria was followed by Italy, England, France, Switzerland and Spain. AL-KO founded a company in the USA in 1983, and a few years later in Australia, New Zealand, Asia and then finally in Africa.

# AL-KO *amc* (Single/Tandem Axle)

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Dear Customer,

Your vehicle is fitted with an amc-chassis conversion supplied and fitted by AL-KO International. As a result the base vehicle has undergone certain changes. The purpose of this manual is to familiarise you with your vehicle. Please read the instructions printed in it carefully, as proper, regular care and maintenance will ensure that your vehicle keeps its value - in many cases regular maintenance is also a prerequisite in respect of warranty claims.

May we wish you a safe journey - wherever you may travel.

## AL-KO International

## Warranty Conditions

The User Manual and the Maintenance Instructions supplied by the manufacturer of the base vehicle, continue to be applicable.

The conditions laid down by the base vehicle manufacturer are only met if the correct spares are used; the manufacturer's recommended spares are your guarantee that the necessary requirements are met.

Maintenance work that may be required on the AL-KO rear axle (see page 20 for more details): Lubrication must be carried out every 20,000 Km or once a year, whichever comes sooner.

**Note: Country specific regulations must be taken into consideration.**

# AL-KO *amc* (Single/Tandem Axle)



Kilometres	Date	Specialist workshop	Signature

Kilometres	Date	Specialist workshop	Signature

## AL-KO *amc* (Single/Tandem Axle)

### AL-KO *amc* Single Axle Chassis

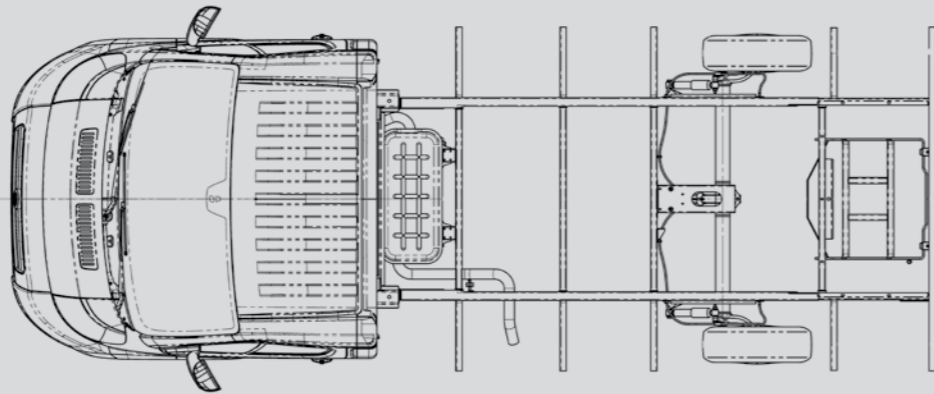
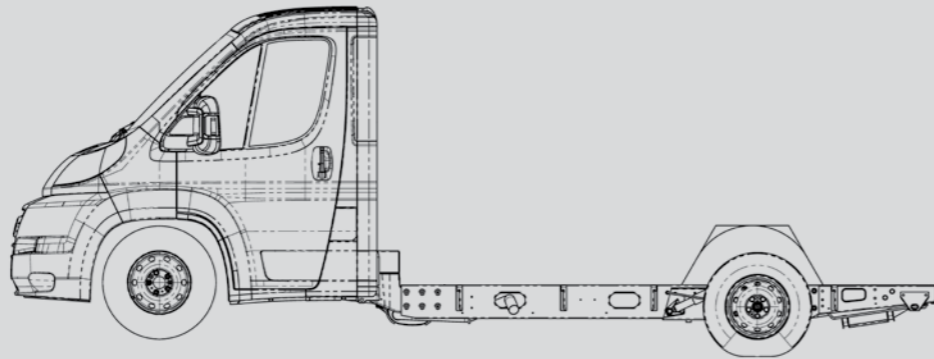
#### Description of Conversion

The original rear frame has been replaced by a hot-dip galvanised AL-KO lightweight chassis.

This chassis is connected to the cab by means of a special bracket assembly.

The original rear axle with leaf springs has been replaced by an AL-KO axle with torsion bar suspension or optional AL-KO Air suspension axle\*, this is integrated in the chassis frame side member.

\*Dependent on version:  
must be specified at time of order.



### AL-KO *amc* Tandem Axle Chassis

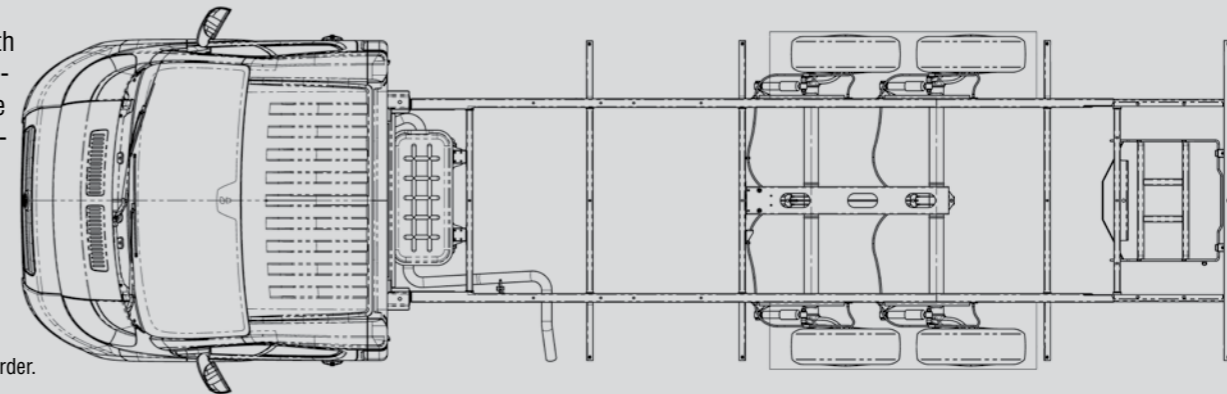
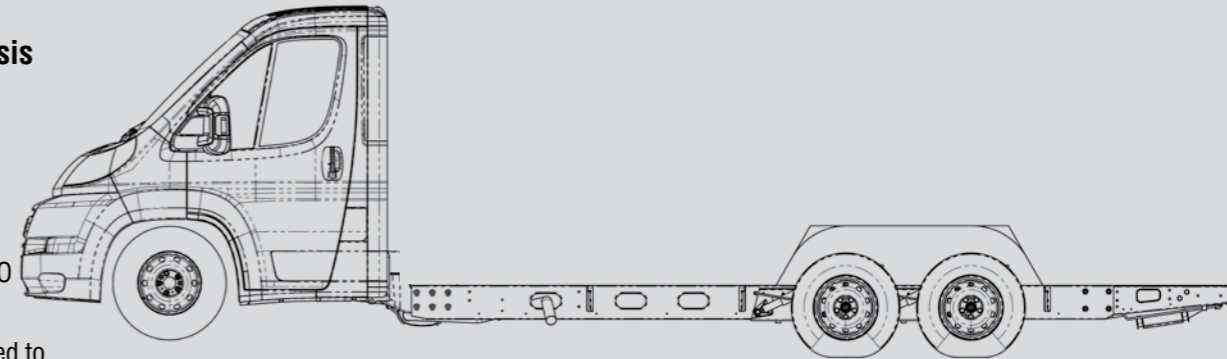
#### Description of Conversion

The original rear frame has been replaced by a hot-dip galvanised AL-KO lightweight chassis.

This chassis is connected to the cab by means of a special bracket assembly.

The original rear axle with leaf springs has been replaced by an AL-KO axle with torsion bar suspension or optional AL-KO Air suspension axle\*, this is integrated in the chassis frame side member.

\*Dependent on version:  
must be specified at time of order.



# AL-KO *amc* (Single/Tandem Axle)

## Towing with a Trailer

### General Notes:

Vehicles with an AL-KO Chassis are approved for use with a trailer.

### Technical Requirements:

If retrofitting a tow bar, ensure it is fitted correctly.



The electrical functions and the electrical circuit diagram will be found in the operating instructions supplied by the base vehicle manufacturer.

You should ensure that the maximum train weight as shown in the registration documents, is not exceeded.

Towing a trailer also reduces the maximum gradient capacity of the vehicle.

Suitable rear view mirrors, in accordance with road traffic regulations are to be fitted.

### Driving Information/Trailer Use

To achieve optimum results when towing a trailer, please observe the following points.

- Refer to base vehicle handbook for towing limits.
- Do not tow with the vehicle empty and the trailer loaded. If this is unavoidable, please drive slowly to allow for the unfavourable weight distribution.
- Always locate heavy objects close to the axle and secure.
- Maximum speed limit is 100kph.
- Ensure tyre pressure of vehicle is set at, fully loaded setting.
- Use low gear when travelling downhill to avoid constant braking.

## Wheels and Tyres – Tyre Pressures (Cold) (bars)

Model	Basic vehicle	Tyres	Twin axle		Triple axle	
			front	rear	front	rear
AMC 35L AMC 37L	35 Light	215/70 R15C 225/70 R15C 215/70 R15CP	4,1 4,1 5,0	4,5 4,5 5,5		
AMC 35H AMC 38H AMC 35HA AMC 40H AMC 42H	35 Heavy  40 Heavy	215/75 R16C 225/75 R16C 225/75 R16CP	4,5 4,5 5,5	5,0 5,0 5,5		
AMC 45HT AMC 50HT	40 Heavy	215/75 R16C 225/75 R16C 225/75 R16CP			4,5 4,5 5,5	3,8 3,8 3,8

# AL-KO *amc* (Single/Tandem Axle)

## Information

- We recommend using camping tyres for all mobile homes.
- Tyre pressures should always be checked with cold tyres. Do not forget to check the spare wheel!
- In order to make sure that tyres wear uniformly, we recommend rotation of the tyres between front and rear axle every 10,000 - 15,000 kilometres. Change tyres diagonally.
- On tandem axle conversions, tyre wear may increase slightly.
- Never travel with the vehicle overloaded: This can cause serious damage to the vehicle and to the wheels and tyres.

## Wheels and Tyres

The correct tyre pressure not only affects the life of the tyre, it also affects vehicle safety, since it changes the behaviour of the vehicle on the road. The pressure of every tyre including the spare should be checked regularly, and especially before you undertake long journeys.

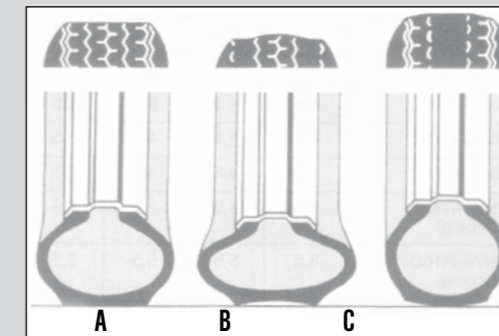
Incorrect tyre pressure causes irregular tyre wear, see illustration.

The tread depth should be at least 3mm, although legislation only specifies 1.6mm minimum tread. Signs of wear in the tread (see arrow on diagram) at 1.6mm depth, signal that the European-wide legal limit has been reached.

The lower the depth of tread, the greater the risk of skidding. For this reason we recommend that the tyre is replaced when the remaining tread has been reduced to 3mm.

## Snow chains

Snow chains must only be fitted to the front tyres (drive wheels) according to Individual Country Regulations. Please also follow the instructions for use provided with the base vehicle.



A - Correct tyre pressure:  
Uniform tread wear

B - Tyre pressure too low:  
Excess wear at the shoulder

C - Excessive tyre pressure:  
Increased wear at the centre  
of the tread



## AL-KO *amc* (Single/Tandem Axle)

### Changing the Wheel

Do not use the jack for loads that are greater than the load given on the jack rating plate.

Ensure the vehicle is on a level, firm surface.

#### ■ Changing Front Wheels

Select first or reverse gear (or P on automatic transmissions).  
Apply the handbrake and chock the remaining wheel.

#### ■ Changing Rear Wheels

Select first or reverse gear (or P on automatic transmissions).  
Do not apply the handbrake but fit chocks under the remaining wheels.



Onboard tools and chocks are usually located underneath the driver's seat.

The spare wheel is normally located at the rear under the vehicle floor. If the vehicle is fitted with a special body, you may find the spare wheel is installed in a special compartment. Please read base vehicle manufacturers handbook in respect of wheel removal.

### Spare Wheel Removal

Use a ratchet spanner and an extension to unscrew the bolts from the spare wheelcarrier. Insert the wheel brace in the seat provided, disengage the wheel carrier and then lower the spare wheel to the ground.

Remove the spare wheel from the carrier.

Using the wheel brace makes it easier to disengage and re-engage the spare wheel carrier.

Slacken wheel nuts by approx. one revolution.

Position the jack in the hole provided as shown on the adjacent illustration.



**If the jack is not positioned where indicated, then this may lead to vehicle damage!**

If the ground is soft, position jack on a solid support.  
After changing the wheel: retighten the wheel nuts cross-wise.

**Torque:**                    **15 inch tyres = 160Nm!**  
                                      **16 inch tyres = 180Nm!**



Insert the wheel which has been changed in the spare wheel carrier.  
Engage the spare wheel carrier with the wheel brace.  
Lock the spare wheel carrier using the two bolts provided.

Now stow the jack and the tool set back under the driver's seat.

**Check the Tyre Pressures!**  
Vehicle Jacking Points

**Front:**



**Rear:**

The jacking points are located in the shock absorber mounts on the left and right, in front of the axle.  
For tandem axle vehicles always place the jack on the shock absorber mounts, on the 2nd axle.





## AL-KO *amc* (Single/Tandem Axle)

### Vehicle Jack

The vehicle jack must only be used when changing the wheel. On no account should it be used for repair work under the vehicle.

### Workshop Jack/Vehicle Lift

When a workshop jack is used, the vehicle must not be loaded and it must be lifted at the points provided on the vehicle sides which are illustrated on page 15.

To prevent damage, a suitable rubber interlayer should be used!

When working under the vehicle, the vehicle must be supported with suitable stands or placed on a vehicle lift.

### Attention:

- Never jack-up the vehicle by the rear axle, front axle, oil sump or transmission.
- When working on a loaded vehicle, use a suitable hydraulic lift platform or work in an inspection pit.
- Always consider the centre of gravity of the vehicle.
- Before driving onto platforms, check for low lying vehicle parts!

### Towing

The vehicle is provided with towing eyes at the front right below the bumper and at the rear left, at the longitudinal frame member (this rear towing eye is not standard on motor homes).

Only attach a tow rope or rigid towbar to these brackets.



Further towing information can be found in the operating instructions for the base vehicle.

### Front Wheel Suspension

Information on this section can be found in the Operating Instructions of the base vehicle manufacturers

### Rear Wheel Suspension

Independent suspension:  
AL-KO trailing link torsion bar suspension axle with linear indentation shock absorber.  
Optional - fully automatic and electronically controlled air suspension if available (must be specified at time of vehicle build).

### Steering

Information on this section can be found in the Operating Instructions of the base vehicle manufacturers

### Braking system

Hydraulic dual-circuit system

Front: Disc brake

Rear: Drum brake or disc brake

Option of ABS or Non ABS

Mechanical handbrake operational on rear wheels.

# AL-KO *amc* (Single/Tandem Axle)

## Model overview X2/50

Model	Base Vehicle	Permissible weight (kg)	Perm. front axle load (kg)	Perm. rear axle load (kg)	Perm. trailer load (kg)	Max perm gross train weight (kg)
AMC 35L	35 Light	3500	1850	2000	2000	5500
AMC 37L	35 Light	3700	1850	2000	2000 <sup>1)</sup>	5500
AMC 35H	35 Heavy	3500	2100	2400	2000	5500
AMC 38H	35 Heavy	3850	2100	2400	2000 <sup>1)</sup>	5500
AMC 35HA	40 Heavy	3500	2100	2400	2000	5500
AMC 40H	40 Heavy	4000	2100	2400	2000 <sup>1)</sup>	5500
AMC 42H	40 Heavy	4250	2100	2400	2000 <sup>1)</sup>	5500
AMC 45HT	40 Heavy	4500	2100	1500/1500	1600 <sup>1)</sup>	6000
AMC 50HT	40 Heavy	5000	2100	1500/1500	1600 <sup>1)</sup>	6000

<sup>1)</sup> Observe permissible car and trailer weights

## Turning circle (between pavements)

Single Axle		Tandem Axle	
Wheelbase (in mm)	Turning circle (in m)	Wheelbase (in mm)	Turning circle (in m)
3000	11,1	3450	14,1
3200	11,7	3600	14,6
3450	12,5	3800	15,2
3600	13,2	4000	15,8
3800	13,5	4200	16,4
4000	14,3	4400	17,0
4200	14,9	4700	17,6
4400	15,5		
4600	16,1		

## General cautions for the use of seat belts.

The driver must comply with (and have the vehicle occupants follow) all the local legal regulations concerning the use of seat belts.

**WARNING:** Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.

**WARNING:** Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.

**WARNING:** Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.

**WARNING:** It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.

**WARNING:** Belts should not be worn with straps twisted.

**WARNING:** Each belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.

**WARNING:** No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operation to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.

## Vehicle Characteristics

### Nameplate

The vehicle is fitted with an AL-KO type plate, which is located on the front cross member in the engine compartment. This contains the following information:

KOBER AG	
	- A -
	- B -
	- C -
	- D - kg
	- E - kg
1 -	- F - kg
2 -	- G - kg
3 -	- H - kg
Typ	- J -

- A - EC type approval number for single or tandem axle vehicles
- B - Stage 2
- C - AMC sequential series number
- D - Total permissible vehicle weight
- E - Total permissible mass for the trailer
- F - Permissible front axle loading
- G - Permissible rear axle loading (Axle 1)
- H - Permissible rear axle loading (Axle 2)
- J - AMC type description



### Note:

The permissible trailer load or permissible car and trailer weight can be taken from the vehicle logbook.

## Maintenance (see page 5)

The instructions and recommendations contained in the User Manual and the Maintenance Instructions are still applicable. Additional maintenance work for the AL-KO rear axle assembly:

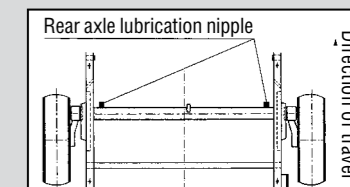
- Rear axle requires lubricating (re-greasing) every 20,000 Km, or once a year whichever comes sooner.

The grease nipples are situated on the axle tube (see sketch). The following grease compound must be used for greasing the bearings on the axle: Co. CONDA - Cardex 3746 SP or a lubricating grease approved by AL-KO

### Note:

The rear axle must be greased when the rear axle is not loaded. If the vehicle is fitted with AL-KO Air Suspension, the axle is maintenance free.

Air suspension specific data is to be found in the Instructions of Use - AMC Air Suspension Handbook.



# AL-KO *amc* (Single/Tandem Axle)

## Repairs

Repairs to the AL-KO *amc*-Chassis and the AL-KO Axle may only be carried out by specialist workshops!

## Accessories

Because of the product liability obligations, attention is drawn to the fact that accessories which are not original AL-KO parts or which have not been approved by AL-KO must not be fitted to the AL-KO chassis.

AL-KO will not accept responsibility for damage caused by failure to observe these requirements (including consequential damage).

Please observe that all details contained in these Instructions of Use, use approximate values.

Alterations to the design, fittings and accessories are liable to change without prior notice.

No claims can be made arising from details, illustrations or accessories published in this operators manual.



## AL-KO Original Accessories



### AL-KO *amc*-load carrier

- Scooters, small motorbikes and even transport boxes can be transported effortlessly on the rear
- The appeal of the AL-KO load carrier is not only the practical platform (2008 x 600 mm) but also a payload of a maximum of 150 kg
- Removable – quickly and without tools (quick-action closing mechanism)
- Ramp (1974 mm long) with chequered inside enables secure loading of the load carrier
- Variable fastening points for lashing straps via various rivet blocks in the platform
- Modern design – high quality optical light carrier



### AL-KO bikepack cycle carrier

- Easy to couple in place
- Fast, comfortable loading and unloading for transporting cycles on the trailer coupling
- Anti-theft device standard for carrier
- Anti-theft device for cycles standard for bikepack premium
- Can be folded up using the foot pedal
- Easy to use if you purchase another vehicle with a trailer coupling
- Quadruple use • Car • drawbar for a caravan • Mobile home • garage wall
- No expert approval (TÜV, DEKRA) required!

## AL-KO *amc* (Single/Tandem Axle)



### AL-KO *amc* Mechanical Corner Steady

- Robust construction of the AL-KO Steady (Load bearing capacity 1,000 kg)
- Extremely small lateral movements (shaking to the side when loaded)
- Integrated swivel mechanism for freeing
- High quality surface protection
- Not to be used as a vehicle jack



### AL-KO *amc* Electric Corner Steady

- Integrated swivel mechanism for freeing
- High quality surface protection
- Robust construction of the AL-KO Steady (Load bearing capacity 1,000 kg)
- Extremely small lateral movements (shaking to the side when loaded)
- Each Steady is easy to operated using handheld remote control (range 10m)
- Strong electric motors with a robust planetary gear (easy emergency operation guaranteed should there be a power failure)



### AL-KO Safe

- Optimum protection of valuable goods against opportunist access
- Locking provided by two solid round bolts
- Individual fitting (vertically or horizontally)

## Notes

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## Notes

## See the light... feel the breeze



### The REMItop vario Multifunctional Skylight gives caravanners the best of both worlds.

The wind-up skylight takes up very little space in the roof. So there's plenty of room left for other appliances that help make caravan life comfortable. Operating the skylight is safe, easy and convenient. Simply reach up and push the fold-away handle to release it from the panel. Now wind the skylight into the preferred position.

- Available in three sizes: 400 x 400mm, 500 x 700mm and 600 x 900mm; adaptable to roof thickness
- Opening angle up to 60° gives maximum airflow; ventilation level exceeds Australian standards
- Plastic frame is lightweight yet sturdy, double acrylic panels provide excellent insulation
- Adjustable, integrated blind system has darkening pleated material
- Close-meshed flyscreen makes for airy, undisturbed sleep



For stockists, call AL-KO on  
**1800 035 603**  
or visit [alko.com.au](http://alko.com.au)

The REMItop vario Multifunctional Skylight is distributed in Australia by AL-KO as agent for the German manufacturer REMIS.



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