

AL-KO amc (Single/Tandem Axle) FIAT / PEUGEOT / CITROËN



Towing with a Trailer

General Notes:

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

Technical Requirements:

If the vehicle has been factory fitted with a tow bar, then all technical and legal requirements for operation have been taken into consideration.

If retrofitting a towbar, use only ones that have been approved by AL-KO and ensure it is fitted correctly.

When ordering a towbar assembly, always indicate the vehicle type and the chassis number.

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 document, 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. Suitable mirror extensions can be found in our Accessory Range.

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 etc
- 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 the axle and secure.
- Maximum speed limit is 60 mph.
- 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)

Type	Base Vehicle	Rim	Tyre	Empty and fully loaded			
				Single Axle		Tandem Axle	
				front	rear	front	rear
MC30XA10	11	M1/N1	205/70R15C (106/104R)	4,0	4,0	-	-
			215/70R15C (109/107Q)	4,1	4,5	-	-
			215/70R15C (109/107Q)Camping	5,0	5,0	-	-
MC31XA10	11	M1/N1	205/70R15C (106/104R)	4,0	4,25	-	-
			215/70R15C (109/107Q)	4,1	4,5	-	-
			215/70R15C (109/107Q)Camping	5,0	5,0	-	-
MC34XA	15	M1/N1	205/70R15C (106/104R)	4,1	4,5	-	-
			215/70R15C (109/107Q)	4,1	4,5	-	-
			215/70R15C (109/107Q)Camping	5,0	5,0	-	-
MC35XA14	15	M1/N1	215/70R15C (109/107Q)	4,1	4,5	-	-
			215/70R15C (109/107Q)Camping	5,0	5,0	-	-
MC35XA	Maxi	M1/N1	205/75R16C(110/108Q)	4,5	4,75	-	-
			215/75R16C(113/111Q)	4,5	4,5	-	-
			215/75R16C(113/111Q)Camping	5,5	5,5	-	-
MC38XA	Maxi	M1/N2	205/75R16C(110/108Q)	4,5	4,75	-	-
			215/75R16C(113/111Q)	4,5	4,5	-	-
			215/75R16C(113/111Q)Camping	5,5	5,5	-	-
MC40XA	Maxi	M1/N2	215/75R16C(113/111Q)	4,5	4,75	-	-
			215/75R16C(113/111Q)Camping	5,5	5,5	-	-
MC35XTAM	Maxi	N1	205/75R16C(110/108Q)	-	-	4,5	4,0
			215/75R16C(113/111Q)	-	-	4,5	3,5
			215/75R16C(113/111Q)Camping	-	-	5,5	3,5
MC45XTA	Maxi	N2	205/75R16C(110/108Q)	-	-	4,5	4,0
			215/75R16C(113/111Q)	-	-	4,5	3,5
			215/75R16C(113/111Q)Camping	-	-	5,5	3,5

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Information:

■ For vehicles with an approved overall weight of 4000 Kg (only approved for Germany) and a rear axle load of 2300 Kg with 215/75 R16C tyres, the air pressure on the rear axle must be increased to 4.75 bar. We recommend using Camping tyres for all mobile homes.

Base Vehicle Type 10: 215 / 70 R15 C (109/107 Q) Camping
Base Vehicle Type 14: 215 / 70 R15 C (109/107 Q) Camping
Base Vehicle Type 18: 215 / 75 R16 C (113/111 Q) Camping

■ 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 6,000 - 9,000 Miles. 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 a 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.

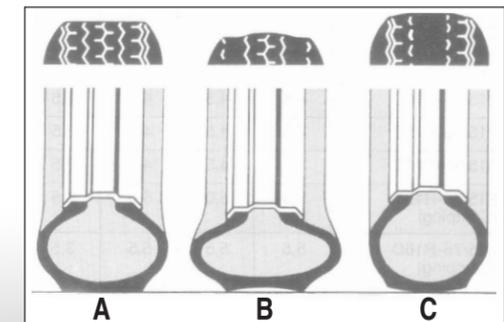
The tread depth should be at least 3 mm, although legislation only specifies 1.6 mm minimum tread. Signs of wear in the tread (see arrow on diagram) at 1.6 mm depth, signal that the European-wide legal limit has been reached.

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 3 mm.

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.



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Wheel Changing

Attention:

Do not use the jack for loads that are greater than the load given on the vehicle 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 handbrake but fit chocks under remaining wheels.



On board 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 wheel carrier. Insert the wheel brace in the seat provided, disengage the wheel carrier and then lower the spare wheel to the floor.

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 the jack on a solid support.

After changing the wheel: re-tighten the wheel nuts cross-wise.

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

Insert the wheel which has been removed 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 Pressure!

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.

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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 12.

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.

13 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 manufacturer.

Rear Wheel Suspension

Independent Suspension:

AL-KO trailing link torsion bar suspension axle with linear identification shock absorber.

Optional - fully automatic and electronically controlled air suspension (must be specified at time of vehicle build).

Steering

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

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.

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Single -Axle-Type Overview

Type ³⁾	Base-vehicle	Permissible weight (kg)	Perm. front-axle load(kg)	Perm. rear axle load(kg)	Perm. trailer load (kg) ²⁾	Max perm gross train weight(kg)
MC30XA10	11	3000	1600	1650	1500 ¹⁾	4300
MC31XA10	11	3100	1600	1750	1500 ¹⁾	4300
MC34XA	15	3400	1750	2000	2000 ¹⁾	5200
MC35XA14	15	3500	1750	2000	2000 ¹⁾	5200
MC35XA	MAXI	3500	1850	2120	2000	5500
MC38XA ⁴⁾	MAXI	3850	1850	2120	2000 ¹⁾	5500
MC40X ⁴⁾	MAXI	4000	1850	2300	2000 ¹⁾	5500

- 1) Observe permissible car & trailer weights
- 2) **Attention: The permissible D-value of the towhead is to be observed in respect of the trailer loads.**
- 3) All designs up to a permissible overall weight of 3500 kg with ABS as an option
- 4) ABS standard.

Tandem -Axle-Type Overview

Type	Base-Vehicle	Permissible weight (kg)	Perm. front-axle load (kg)	Perm. rear axle load (kg)	Perm. trailer-load (kg) ²⁾	Max perm gross train weight(kg)
MC35XTAM ³⁾	MAXI	3500	1850	2x1200	2000	5500
MC45XTA ³⁾	MAXI	4500	1850	2x1500	1700 ¹⁾	5500

- 1) Observe permissible car & trailer weights
- 2) **Attention: The permissible D-value of the towhead is to be observed in respect of the trailer loads.**
- 3) ABS standard

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Turning Circle

Single Axle	
Wheelbase (in mm)	Turning Circle (in m)
2850	ca. 11.2
3046	ca. 11.9
3200	ca. 12.4
3273	ca. 12.8
3523	ca. 13.4
3700	ca. 14.1
3776	ca. 14.4
3923	ca. 14.9
4023	ca. 15.2
4223	ca. 15.9

Tandem Axle	
Wheelbase (in mm)	Turning Circle (in m)
3200	ca. 12.7
3273	ca. 13.1
3523	ca. 13.7
3700	ca. 14.4
3776	ca. 14.7
3923	ca. 15.2
4023	ca. 15.5
4223	ca. 16.2
4350	ca. 16.8

Vehicle Characteristics

Type Plate

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:

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



Note:

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

Maintenance

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 at the front or at the bottom of the axle tube (see illustration).

Any of the following grease compounds can be used for greasing the bearings on the axle:

Co. Klüber: Grease GL 1501

Co.CONDA: Grease 3746 SP

or Shell: Retinax LX Grease

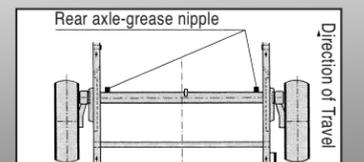


Note:

The rear axle must be greased when the rear axle is not loaded!

Note:

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 for Use - AMC Air Suspension Handbook. Art. Nr. 1560613