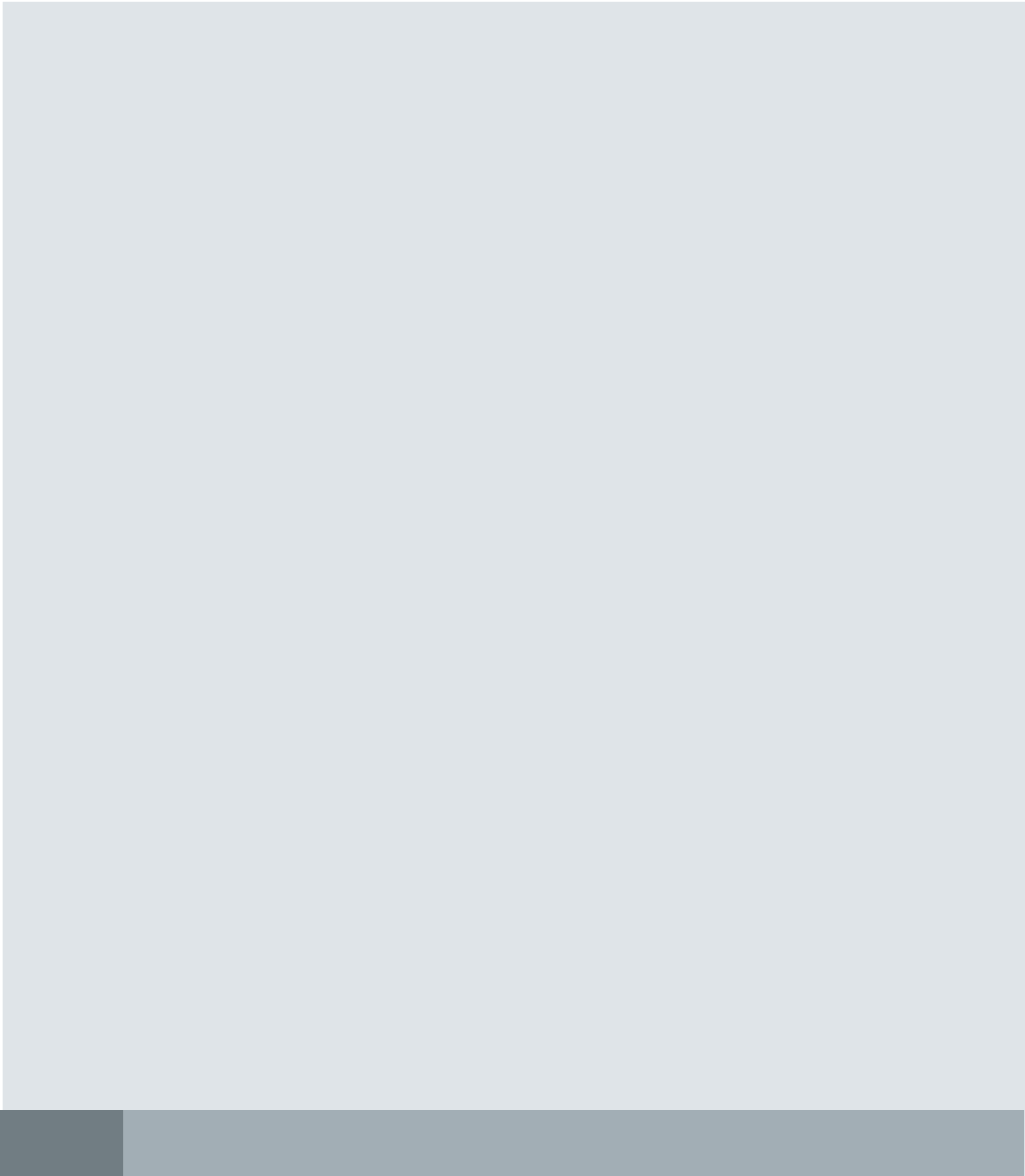


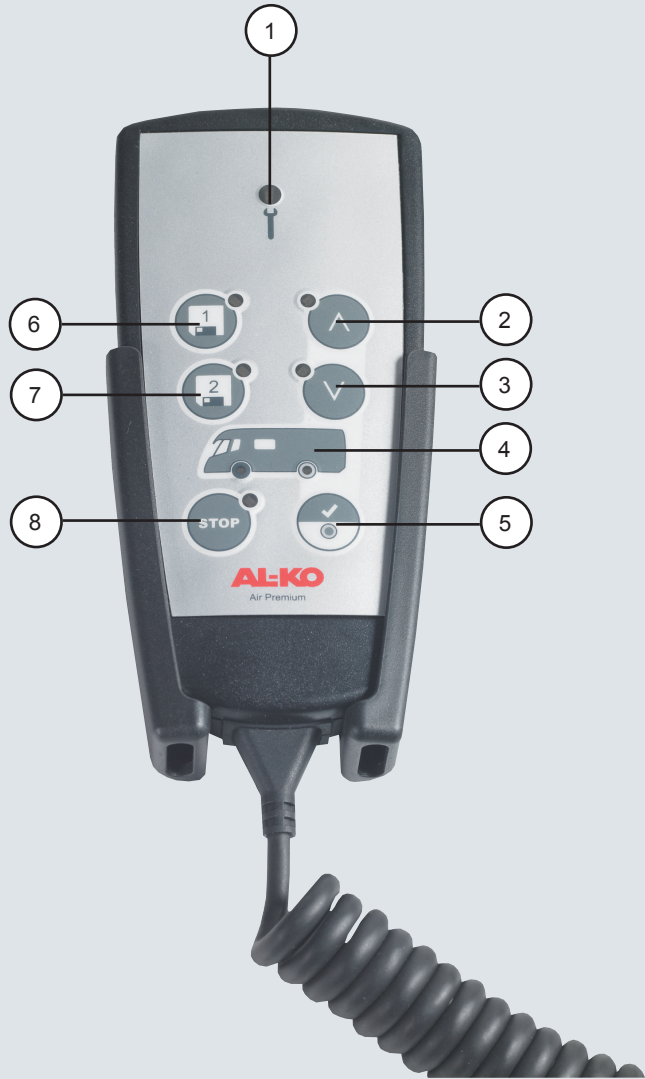
INFORMATION | MANUALS | SERVICE

AIR PREMIUM X2

Operating Instructions







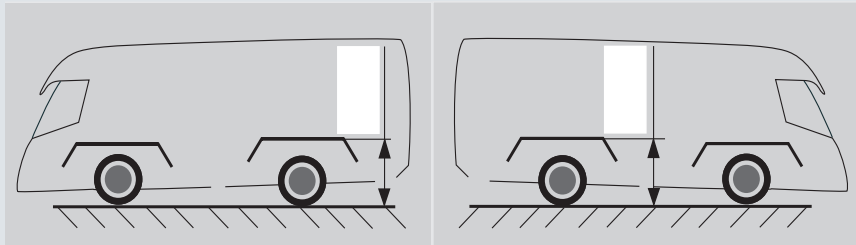
Dear customer,

Your vehicle is equipped with the AL-KO AIR Premium X2 electronically controlled air suspension system.

These operating instructions explain the operational and functional aspects of the air suspension system. They also provide you with important safety and operating instructions.

Please note the following before familiarising yourself with the operation of your vehicle:

- To be sure that you know how much air is required if an emergency filling should ever be necessary:
 - Park your vehicle on a level surface with the suspension at the driving level.
 - Measure the clearances at the left and right sides of the rear axle
 - Note these values in the illustration



Emergency filling dimensions

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About this documentation

- Read this documentation before putting the device into operation. This is a precondition for safe working and flawless operation.
- Observe the safety warnings in this documentation and on the device.
- This documentation is a permanent integral part of the product described and must be passed on to the new owner if the machine is sold.

Explanation of symbols



Following these safety warnings carefully can prevent personal injury and/or material damage.



Special instructions for greater ease of understanding and improved handling.

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Product description

The AL-KO Air Premium X2 is an electronically controlled air suspension system for lightweight commercial and special-purpose vehicles. The electronic control system ensures that the vehicle remains at the same driving level regardless of the load. This is controlled via two level sensors mounted on the suspension. The level control system only operates when the ignition is switched on.

The vehicle can also be raised or lowered from the normal driving position via a remote control.

- The automatic level control provided by an AL-KO air suspension system cannot prevent damage to the vehicle or vehicle body caused by overloading.
- Always take care to ensure that the vehicle is not overloaded. Overloading is not visibly obvious when the air suspension is used. AL-KO recommends axle-wise weighing of the vehicle before commencing the journey.

Intended use

The AL-KO Air Premium air suspension system is used for improved suspension and automatic level control of the front and rear axles of an AL-KO AMC chassis.

Using this machine for any other or additional purpose is considered contrary to its intended use. The manufacturer cannot be held liable for any damage resulting from such use.

Incorrect use

- The air suspension must not be used for raising the vehicle for servicing purposes. (For example: wheel change)

Safety instructions



Caution!

The factory-installed air suspension system must not be modified in any way!

- Only perform raising or lowering operations with the vehicle at a standstill or a maximum speed of 25 km/h.
- Before starting a lifting or lowering operation when parked:
 - secure the vehicle against rolling away
 - ensure that this presents no danger to persons and/or property
- to prevent tensioning of the chassis during raising and lowering operations, do not actuate the brake pedal when raising and lowering.
- The AL-KO air suspension must not be used for raising the vehicle for servicing purposes (for example: wheel change).
- Switch off the air suspension system via the stop button (8) before raising one or more axles using a jack or hydraulic lift.
- Always use a jack or hydraulic lift for changing wheels or servicing the vehicle.
- Malfunctions/Faults in the air suspension system can impair the driving stability of the vehicle. This can cause the vehicle to slide while driving or the rear of the vehicle to lose traction during cornering.
- Do not lower the vehicle below the normal driving level when using snow chains!



Danger presented by damage!

In the case of damage or a non-correctable malfunction (indicator light (1) is lit) deactivate the system and immediately consult an authorised specialist workshop. Drive especially carefully and at a significantly reduced speed.

Operation

Remote control overview

See figure fold-out side

Button	Function	Speed
1	Indicator light (service LED)	
2	Raise driving level	up to 25 km/h
3	Lower driving level	up to 25 km/h
4	Display - selected axle	up to 25 km/h
5	Driving level	up to 25 km/h
	Manual operation	up to 25 km/h
6	Memory 1	up to 25 km/h
7	Memory 2	up to 25 km/h
8	Stop button	up to 25 km/h
	Service function	

i The driving level is automatically set when the maximum adjustment speed is exceeded. The vehicle may not be driven at a higher speed until the driving level has been reached.


Caution!

Take care to ensure adequate clearance at the sides, above and below the vehicle before every raising or lowering operation.

- The air suspension system is ready for operation when the vehicle ignition is switched on.
- The air suspension does not react to the remote control at speeds above 25 km/h. The system maintains the programmed driving level.
- Performing raising or lowering operations with an applied handbrake can lead to tension or noises in the vehicle. Subsequent releasing of the handbrake can then cause the vehicle to unexpectedly move up or down by a small amount.

Starting the air suspension system



1. Switch on the ignition,
 - the indicator lamp lights up for one second:
the system has started correctly.
 - Rear axle LED in display element 4 lights up:
the vehicle is at the driving level
 - Rear axle LED in display element 4 and a function button light up:
the previously selected level has been reached.


“Rear axle” display



The LED in the illustrated vehicle indicates that the rear axle is activated for manual operation


Driving level / Axle selection




1. Switch on the ignition, vehicle at a standstill or < 25 km/h.
2. Press  briefly: Return to driving level, LED lights up.

Raise vehicle "Rear axle"




1. Switch on the ignition, vehicle at a standstill or < 25 km/h.
2. Press the  button until the desired level is reached.
 - Button flashes while raising
 - Button lights up permanently when the level has been reached.

Alternatively:


1. Press the  button briefly.
 - Button flashes while raising
 - Button lights up permanently when the **uppermost** level has been reached.

Lower vehicle “Rear axle”







1. Switch on the ignition, vehicle at a standstill or < 25 km/h.
2. Press the  button until the desired level is reached.
 - Button flashes while lowering
 - Button lights up permanently when the level has been reached.

Alternatively:

1. Press button  **briefly**.
 - Button flashes while lowering
 - Button lights up permanently when the **lowest** level has been reached.



Saving the set level



1. Switch on the ignition, vehicle at a standstill or < 25 km/h.
2. Use the  or  button to select the desired level.
3. Press the  or  button until the signal tone sounds.


Setting a stored level




1. Switch on the ignition, vehicle at a standstill or < 25 km/h.
2. Press the  or  button briefly
 - The button flashes while the level is being set.
 - Button lights up permanently when the level has been reached.

Returning the vehicle to the driving level



- From a lowered level:
1. Press the  button briefly.

Vehicle raises to the driving level

- From a raised level:
1. Press the  button briefly.

Vehicle lowers to the driving level

Stop button



The stop button has three different functions:

- Emergency off
- Switching off the air suspension system
- Switching the service mode on/off

Emergency off



- Press  once

*All functions are **IMMEDIATELY** interrupted*

- Press  twice

The system is once more active and remains in the current position.

- Select a new function

Switching off the air suspension system



1. Press  once

- Button lights up permanently

Switching on the service mode



1. Park the vehicle and leave the ignition switched on. Manual operation is activated

2. Press  briefly.

- Button lights up permanently

Switching off the service mode



1. Press  again.

- The stop button lamp goes out

- *The system is now ready for operation again.*

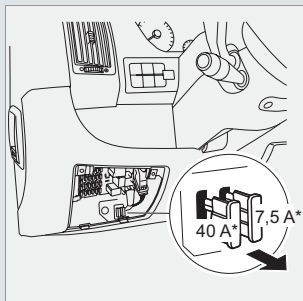
- Service LED lights up for about 1 second
The system is now ready for operation again.

Performing a system reset

1. Switch the ignition off and on again.

Alternatively:

- Remove and then re-insert the fuse (7.5 A) in the passenger compartment fuse box.



Passenger compartment fuse box

- i * 7,5 A for control system
- * 40 A for compressor

Service / Wheel change

Danger presented by damage!

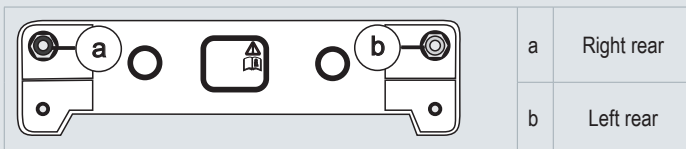
Switch off the air suspension system via  before raising one or more axles using a jack or hydraulic lift.

- The AL-KO must not be used for lifting the wheels for servicing purposes (For example: wheel change).
- Always use a jack or hydraulic lift for changing wheels or servicing the vehicle.

Emergency filling of the system

Two emergency filling valves are mounted on a bracket in the engine compartment. If the system fails, these can be used to manually pump up the air suspension.

⚠ Danger from system activities!
 Always remove the system fuses before performing emergency filling!



Emergency filling valves

i The valves are mounted in the same relative position (in the driving direction) as the air suspension bellows that they feed. They are also labelled.

Troubleshooting

- In the case of malfunctions please visit the nearest specialist workshop authorised by AL-KO.
- In the case of a loss of air pressure immediately visit an authorised specialist workshop. Drive especially carefully and at a significantly reduced speed. Do not drive with a trailer.
- Air suspension bellows that have been driven without pressure under emergency running conditions must be replaced for reasons of safety.
- Our AL-KO customer service is happy to help you with information on our authorised specialist workshops and any spare parts that may be required.

Troubleshooting plan

Fault	Possible cause	Solution
The vehicle is tilted	Change of loading after switching off the air suspension	Switch on the air suspension, lower the vehicle and set the driving position anew.
The remote control does not react.	Ignition switched off.	Switch on the ignition.
	7.5 A fuse is blown	Replace the 7.5 A fuse
	Operating voltage too low	Charge the vehicle battery
Compressor does not operate	Ignition switched off.	Switch on the ignition
	40 A fuse is blown.	Replace the fuse
	Operating voltage too low	Charge the vehicle battery
Compressor does not switch off	Faulty compressor relay	Remove the 40 A fuse
	Loss of air pressure	Visit a specialist workshop
Air suspension does not lower	Vehicle speed too high	Observe the speed limit for suspension adjustment
	Fuse defective	Replace the 7.5 A fuse
Air suspension does not raise	Vehicle too heavily loaded.	Reduce the load








In the case of faults that are not listed in this table, or faults that you cannot rectify without assistance, please contact our AL-KO customer service department.

Fault code

The service LED flashes when the system detects a malfunction. When you now press the stop button, the system provides a fault code via a combination of lit and flashing LEDs.

	The button LED is off
	The button LED flashes
	The button LED lights up

The following section lists the possible fault codes and their associated faults.

Code	Fault/Description	Solution
	Permissible compressor run time exceeded.	Allow the compressor to cool down. Please visit a specialist workshop if this fault recurs.
	Permissible valve block run time exceeded.	Allow the valve block to cool down. Please visit a specialist workshop if this fault recurs.
	Compressor operating pressure reached.	Reduce the vehicle load.
	Battery voltage too low to raise the air suspension.	Start the vehicle engine.
	Battery voltage too low for the air suspension.	Charge the vehicle battery.

Correcting a fault

You must switch off the ignition to confirm the fault message. The fault message is then deleted. If the fault recurs anew then please visit a specialist workshop.

i In the case of faults that are not listed in this table, or faults that you cannot rectify without assistance, please contact our AL-KO customer service department.

Maintenance and care

The AL-KO air suspension system is maintenance-free. However, regular cleaning and visual inspections help to counteract the natural wearing process.

The following components should therefore be checked for signs of wear, leaks or damage during normal vehicle servicing.

- Air suspension bellows
- Compressed air lines
- Shock absorbers

The vehicle level may slowly sink when parked for longer periods of time. To avoid permanent distortion and damage to the air bellows, the vehicle:

- must be supported by lifting supports (optional accessory) or
- the air suspension bellows must be filled with air once a week

Permitted cleaning agents

- Soap suds
- Ethanol
- Methanol
- Isopropanol

The following are not permitted

- Organic solvents
- Abrasives
- Steam cleaners and high-pressure cleaners
- Open flames

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