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.

ℹ️ Special instructions for greater ease of understanding and improved handling.
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 boy 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

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

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 1 or 2 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 **STOP** once
  
  *All functions are **IMMEDIATELY** interrupted*

- Press **STOP** 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 **STOP** 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 **STOP** briefly.
   
   - Button lights up permanently

Switching off the service mode

1. Press **STOP** 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.

Service / Wheel change

⚠️ Danger presented by damage!

Switch off the air suspension system via [STOP] 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!

<table>
<thead>
<tr>
<th></th>
<th>Right rear</th>
<th>Left rear</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td></td>
<td>b</td>
</tr>
</tbody>
</table>

Emergency filling valves

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

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

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.

- 📡 Off: The button LED is off
- 📡 On: The button LED flashes
- 📡 On: The button LED lights up
The following section lists the possible fault codes and their associated faults.

<table>
<thead>
<tr>
<th>Code</th>
<th>Fault/Description</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Compressor Icon]</td>
<td>Permissible compressor run time exceeded.</td>
<td>Allow the compressor to cool down.</td>
</tr>
<tr>
<td>![Valve Block Icon]</td>
<td>Permissible valve block run time exceeded.</td>
<td>Allow the valve block to cool down.</td>
</tr>
<tr>
<td>![Compressor Icon]</td>
<td>Compressor operating pressure reached.</td>
<td>Reduce the vehicle load.</td>
</tr>
<tr>
<td>![Battery Icon]</td>
<td>Battery voltage too low to raise the air suspension.</td>
<td>Start the vehicle engine.</td>
</tr>
<tr>
<td>![Battery Icon]</td>
<td>Battery voltage too low for the air suspension.</td>
<td>Charge the vehicle battery.</td>
</tr>
</tbody>
</table>

**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.

**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
- Steam cleaners and high-pressure cleaners
- Abrasives
- Open flames
<table>
<thead>
<tr>
<th>Land</th>
<th>Firma</th>
<th>Telefon</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>AL-KO KOBER Ges.m.b.H.</td>
<td>(+43)5282/3360-0</td>
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<td>AL-KO KOBER GmbH</td>
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<td>DK</td>
<td>JS Komponenter A/S</td>
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<tr>
<td>E</td>
<td>AL-KO Espana</td>
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<tr>
<td>EST</td>
<td>AL-KO KOBER SIA</td>
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<td>F</td>
<td>AL-KO S.A.S.</td>
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<td>I</td>
<td>AL-KO KOBER GmbH</td>
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<td>AL-KO KOBER SIA</td>
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<td>AL-KO KOBER SIA</td>
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<td>(+371)7/807-018</td>
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<td>(+48)61/816 1980</td>
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<td>OOO AL-KO KOBER</td>
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<td>(+7)499/96600-00</td>
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<td>AL-KO KOBER AB</td>
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<td>(+46)31/57 4563</td>
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<td>SK</td>
<td>AL-KO KOBER Slovakia Spol. s.r.o.</td>
<td>(+421)2/45 99 4112</td>
<td>(+421)2/45 64 8117</td>
</tr>
<tr>
<td>UA</td>
<td>TOV AL-KO KOBER</td>
<td>(+380)44/453-6163</td>
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