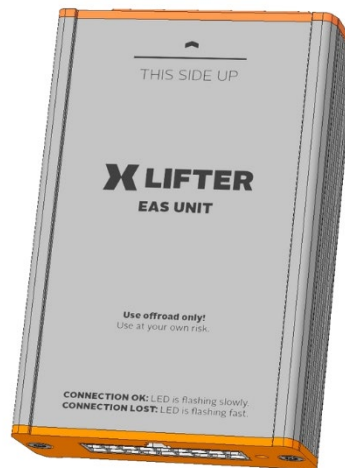


X LIFTER

World's first

Air-suspension controller with self-levelling feature

for the Discovery 3/4 (LR3/4) L319, Range Rover L322 and Range Rover Sport L320
Land Rover® vehicles



User manual (Installation & user guide)

Model X2, Firmware 2.03

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Quick overview:

Congratulations on your XLifter purchase! I'm glad you decided to read the instructions. Many users prefer to work things out themselves, which is certainly possible. Although I've made the product as simple and intuitive as possible, this guide includes useful tips, warnings and explanations of how it works.

Chapter 4 covers installation. Skip it if XLifter is already installed.

The most important is chapter 5 - Instruction for use, which describes XLifter's everyday functions. Please read it again after a few days of hands-on experience.

Thank you for your trust in XLifter. Enjoy using it!

1. Legal disclaimer

This product is an air-suspension controller for Land Rover vehicles, named XLifter (hereinafter referred to as the “**device**” or “**XLifter**”).

XLifter is an additional device that can change or adjust the electronic control of the air suspension in the vehicle in which it is installed.

XLifter is not designed or approved for installation in vehicles operated on public roads, in particular under Act No. 361/2000 Coll., as amended. The manufacturer accepts no liability arising from technical requirements for vehicles used on public roads if you use this product on public roads or elsewhere where its use may be unauthorised, whether in the Czech Republic or another jurisdiction. **The end user assumes all liability associated with using the device on public roads, in particular under the mandatory technical requirements set out in Act No. 56/2001 Coll. and Regulation No. 341/2014 Coll.**

By installing the device, the end user releases the manufacturer from any liability for its effects on, or damage to, other vehicle systems, parts or components, whether mechanical or electronic, including financial or non-material loss. The end user also acknowledges that the product is intended for use under **controlled conditions, at low speeds and with increased caution.**

The end user undertakes to inform any future owner of the vehicle that the device is installed.

By installing the device, you acknowledge and agree to the above terms. Use XLifter only off road, never on public roads.

2. General description

XLifter is an advanced air-suspension controller for specified Land Rover vehicles. It helps you make full use of your Land Rover's air suspension for off-road driving and expeditions.

XLifter gives you finer control over vehicle height. Raising the vehicle above Land Rover's "Off-road" height helps you tackle difficult terrain. XLifter is not subject to the 40 km/h limit, making long stretches of sand, green lanes or gravel roads more manageable. It retains your selected lift setting for as long as you need it. Lowering the vehicle slightly improves cornering stability and aerodynamics, which may improve fuel efficiency. Lowering it below the original access height helps when entering low-clearance garages or ferries and makes loading easier.

XLifter's self-levelling feature makes sleeping in the vehicle or a rooftop tent more comfortable on expeditions.

XLifter is intuitive to use. The control module's graphical OLED display and physical buttons are designed for off-road use.

The XLifter EAS unit communicates wirelessly with the control module. Installation is simple and fully reversible. **No drilling, soldering or routing of wiring through the vehicle is required.**

XLifter is designed for Land Rover® Discovery 3 (LR3), Discovery 4 (LR4), Range Rover® Sport (L320) and Range Rover® L322 2007-2012 vehicles.

This installation guide covers the Discovery 3 and 4, however, RRS L320 is very similar and L322 is covered by video guide.

3. Safety information

This manual contains important information on installing and using XLifter. Read this section to understand its features and operate it safely. Use XLifter only for its intended purpose, as described in this manual.

What the safety symbols in this user manual mean:



This symbol identifies hazards or unsafe practices that may damage the vehicle or its systems. **Read the marked text carefully and follow the instructions to avoid these risks.**



Warning: This symbol, with the word “Warning” beside it, indicates situations where failure to follow the instructions may result in serious injury or damage to the equipment or vehicle.

Safety instructions appear throughout the descriptions of XLifter’s functions. The most important are summarised below:

General warnings:



Warning: Only people familiar with this manual should operate XLifter. If someone else will be driving, activate Keylock as a safety measure (*see chapter 5.6*).



Warning: If XLifter remains installed when you sell the vehicle, notify the new owner and familiarise them with this manual. Keep the manual in an accessible place in the vehicle for future reference.



Warning: Do not use XLifter on public roads. Do not lower or raise the vehicle at high speeds.



Warning: The same warnings apply whether you control XLifter from the control module or the mobile app.

Warnings for the lifter and lifter-free functions:



Warning: Avoid overstressing the CV joints **at extreme lifts**: “Sky Rocket” (+75 mm), or any lift program with the original vehicle height set to Off Road. **Use the accelerator gently when low range is engaged and the steering is turned sharply left or right.**



Warning: With the original vehicle height set to “Off Road”, avoid using an XLifter lift above +25 mm for extended periods, as this may increase air-spring wear.



Warning: Avoid overworking the compressor. Repeated height changes can overheat it; three cycles may be enough. At approximately 130 °C, the Land Rover EAS unit inhibits further operation until it cools down. Cooling takes about 10 minutes. **Monitor the compressor temperature!**

Warning for the levelling function:



Warning: NEVER start levelling while driving. It sets different wheel heights, creating a potentially dangerous situation. Start levelling **ONLY** when the vehicle is stationary.



Exit the levelling function before driving. Driving with uneven wheel heights can be dangerous and may damage the vehicle. **NEVER leave your campsite with levelling still active!**



Do not engage the electronic parking brake (EPB) before or during levelling. Tension in its cables can restrict wheel movement. You may use the function with the transmission in Park and the parking brake released.



Warning: Close all doors before starting levelling to prevent damage from contact with nearby obstacles.

4. Installation

4.1. Package contents

1x XLifter EAS unit	1x Cable harness with the bypass plug
1x XLifter control module	1x Velcro strip for easy control module installation
1x User manual	1x XLifter sticker

4.2. Installation overview

XLifter consists of two main components: the control module and the EAS unit (EAS stands for Electronic Air Suspension). The control module has a display and buttons for selecting settings and viewing operating status. The EAS unit adjusts wheel height sensor signals and measures vehicle tilt. The two units communicate wirelessly.

Place the control module in an easily accessible location inside the vehicle. Connect it to a 12 V supply via the cigarette lighter socket. Experienced installers may cut off the power plug and connect the cable to a suitable 12 V supply point. Concealing the cable gives a tidier installation and leaves the socket free.

There is a range of 3D printable mounting frames at <https://www.xlifter.com/xlifter-accessories/>

The XLifter EAS unit is installed near the original air-suspension control unit and connects to it through the supplied harness. It is fixed securely to the vehicle so that it can also act as an accurate tilt sensor.

Watch the XLifter installation video before starting!

Find it on YouTube by searching for “XLifter installation guide”:

Discovery 3,4 & Range Rover Sport: <https://youtu.be/gEOBpTRY0O8>

Range Rover L322 2007 – 2009: https://youtu.be/Fz_a2Fp9IGc

Range Rover L322 2010 – 2012: https://youtu.be/Qq9_o0icBFQ

The guide is also available on Facebook (<https://www.facebook.com/XLifterEAS/>) and at <http://www.xlifter.com/installation/> (planned for 4Q 2027).

See the XLifter FAQ (frequently asked questions): <https://www.xlifter.com/faq/>

Quick installation overview in 4 steps:

1. Install the XLifter EAS unit.
2. Connect the cable harness.
3. Connect the control module to a 12 V socket.
4. Set the vehicle type and steering position, then run the calibration procedure.

This installation guide covers the Discovery 3 and 4. The procedure is very similar for the Range Rover Sport L320; for the Range Rover L322, see the video guides.

4.3. EAS unit installation



The following procedure describes EAS unit installation in a Discovery 3/4.

The Range Rover Sport's original EAS control unit is about 10 cm lower than in the Discovery.

To access the connectors, remove the footwell panel and the adjacent left-hand panel containing the bonnet release handle.

Estimated installation time:

- The EAS unit installation should take approximately 20 minutes.

Tools required:

- A standard cross-head screwdriver (e.g. the one in the Land Rover toolkit).
- A torch to illuminate the installation area.

EAS unit installation procedure:

1. Disconnect the vehicle battery according to the vehicle's manual (optional).

- a. Make sure the ignition is off.
- b. Disconnect the negative (-) terminal, then (+) one.
- c. Wait one minute.

Note: Battery disconnection is not essential; installation can be carried out without it.

2. Remove the lower dashboard cover beneath the steering wheel.

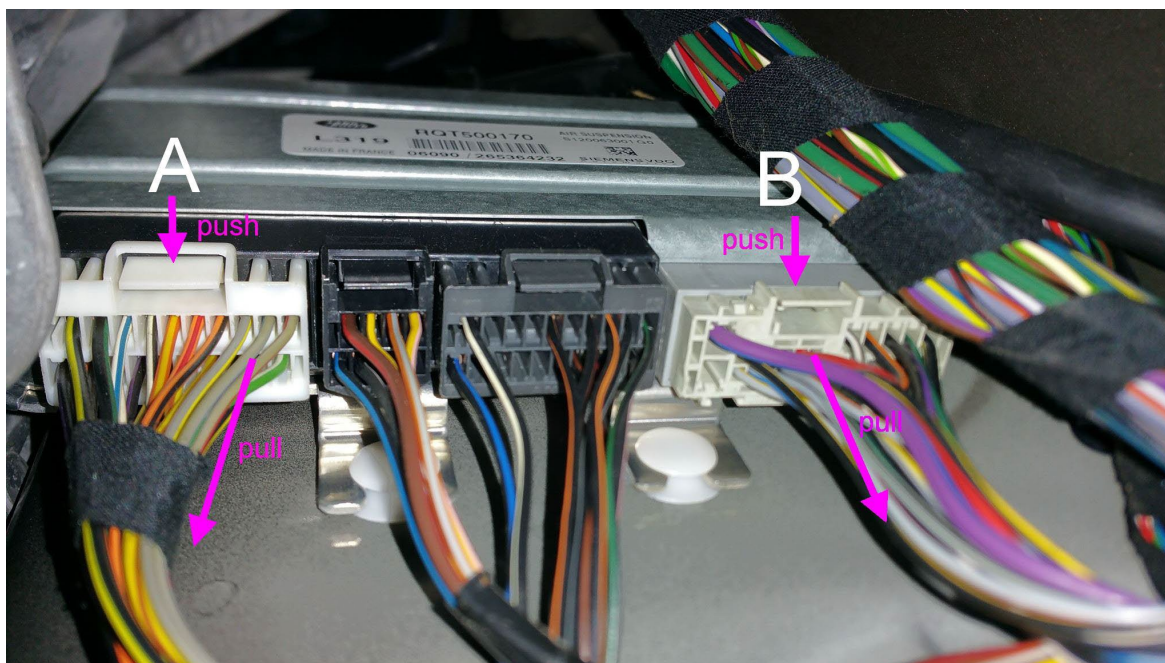
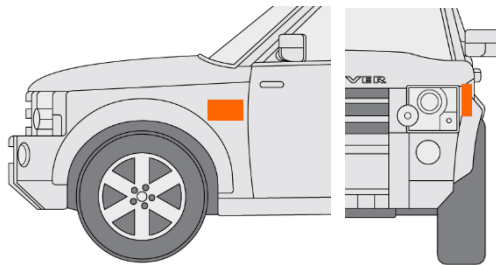
△ If installing to the Range Rover Sport L320, see the note above.

- a. Unscrew the two screws holding the cover.
- b. Pull in the direction of the RIGHT green arrow (see picture below) to release the clip securing the cover to the centre tunnel.
- c. Hold the cover in the centre. Pull it down and slightly towards you, lowering it by approximately 10 cm.
- d. Disconnect the light connector located on the left side (right for RHD vehicles) of the cover.
- e. Remove the entire cover.



3. Disconnect the wiring harnesses from the original Land Rover EAS unit.

- The Land Rover EAS unit is on the left inner side of the body (right on RHD vehicles), roughly halfway between the base of the A-pillar and the driver's footrest.
 - Use a flashlight to illuminate the work area.
- a. Disconnect connectors A and B, the two outermost connectors. Press each locking tab and pull the connector out.
 - b. Temporarily tuck the disconnected harnesses behind the other cables to create space for installing the XLifter EAS unit.



4. Install the XLifter EAS unit



- Practise positioning the EAS unit before removing the protective film from the 3M reclosable fastener. Once attached, the adhesive holds firmly and is difficult to reposition.
 - The XLifter EAS unit contains a tilt sensor. Mount it upright and align it as closely as possible with the vehicle's level position. If mounted horizontally or upside down, the levelling function will not work correctly.
- a. Remove the protective film from the 3M fasteners on the unprinted side of the EAS unit.
 - b. Attach the XLifter EAS unit to the original Land Rover EAS unit as shown.
 - The printed side of the unit faces the centre tunnel.
 - The arrow marked THIS SIDE UP must point upwards.
 - Press firmly for a few seconds to secure the adhesive.



5. Connect the XLifter cable harness

- Connect the previously disconnected vehicle plugs to A(in) and B(in) on the supplied harness.

Take care with B(in). Do not bend the wires sharply near the connector, as this can misalign the pins and prevent full insertion. If it sticks halfway in, disconnect it, gently reposition the wires and try again. See the video guide.

- Position the harness and connect A(out) and B(out) to the original Land Rover EAS unit.
- Connect C to the XLifter EAS unit.

NOTICE:

- Secure loose cables so they cannot move freely. Use cable ties if necessary (not supplied) to prevent vibration from loosening the connections over time.
- The connectors are not interchangeable, so the harness cannot be connected in the wrong arrangement.

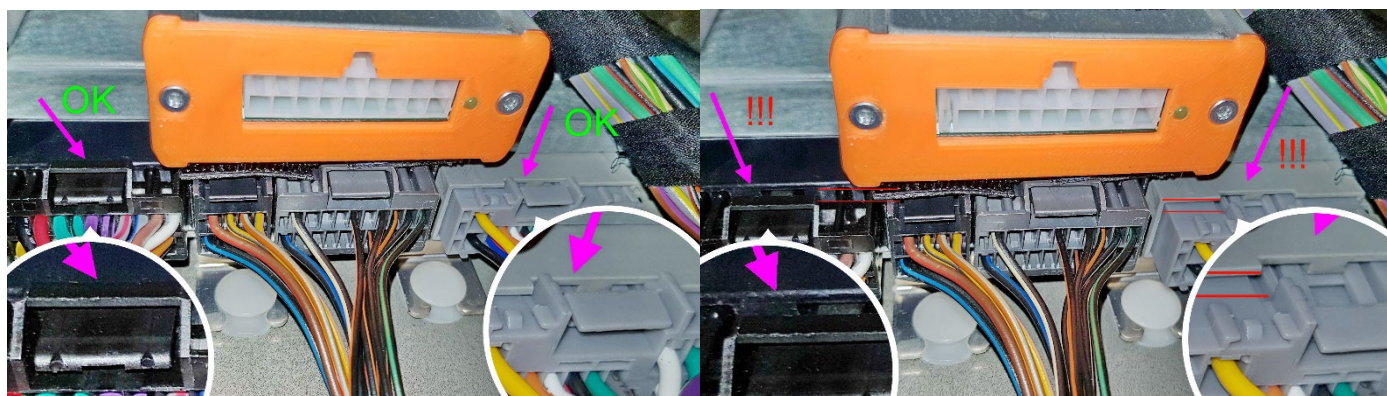
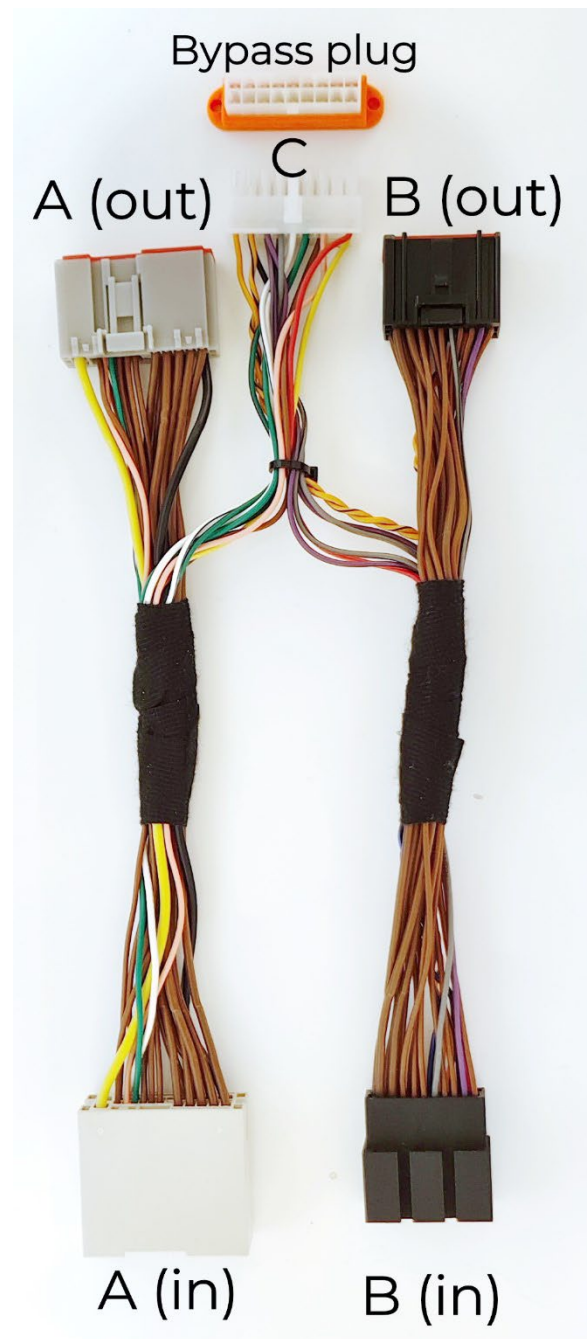


Fully insert every connector as shown. Some, especially the B connectors, require more force to seat fully. Incomplete insertion can cause unpredictable problems, so check each connection carefully.



The supplied **bypass plug** can be connected to C in place of the XLifter EAS unit for two purposes:

- It allows the harness to remain installed while the EAS unit is removed, for example for replacement.
- It allows you to test the harness. With the bypass plug connected, the vehicle must behave normally, as if the harness were not installed.



6. Reconnect the vehicle battery according to the vehicle's manual.

- Only if you disconnected it in step 1.
- Discovery 4: The "Suspension error" will be displayed. **Cycle the ignition to clear it.**
- Discovery 3: The "Suspension error" should clear within a few seconds.

7. Check the status LED on the XLifter EAS unit

- The green status LED flashes twice per second, indicating that the unit is ready and waiting for a wireless connection from the control module.

8. Refit the lower dashboard cover.

- Refit the cover by following step 2 in reverse order.
- Leave this until everything has been checked and is working.
- Do not forget to connect the light connector.
- Align the three locating tabs on the rear of the cover with the holes in the panel behind the pedals.
- Flex the cover slightly. Fit the side nearest the EAS unit first, then the side next to the centre tunnel.

4.4. Control module installation

The control module and EAS unit communicate wirelessly, so you can choose a convenient mounting location.

Power the control module from an ignition-switched 12 V supply, such as the cigarette lighter socket. Experienced installers may cut off the plug and hard-wire the cable to a suitable supply, such as the socket wiring behind the centre dashboard, to conceal it. Red is positive (+); black is negative (-). The module has reverse-polarity protection.

Control module installation procedure:

1. Connect the control module to power.

- Plug the 12 V power plug into the cigarette lighter socket.
- Secure the control module in a suitable location using the supplied Velcro or another suitable mounting method. You can do this later if preferred.

2. Quick-check the control module

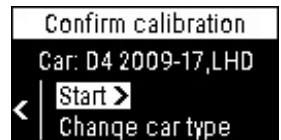
- Switch on the ignition.
- The display shows the animated logo and a scrolling indicator while searching wirelessly for the XLifter EAS unit.
- The units are already paired. They should connect within 10 seconds. Allow up to 20 seconds if the EAS unit has just been powered through connector C or by reconnecting the vehicle battery.
- Once connected, the home screen appears, showing zero lift and "Not Calibrated".



4.5. Vehicle type and calibration settings

Before first use, select the vehicle type and run the calibration procedure.

1. Press ► **three times** to open **“Confirm calibration”**, passing through the main and Settings menus. The required items are preselected.



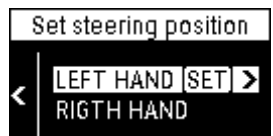
2. Set the car type

- The default setting is Discovery 4 (D4), left-hand drive. If this matches your vehicle, skip the vehicle type and steering position selection steps.
1. Use ▲▼ to select **“change car type”**, then press ►.
 2. Use ▲▼ to **select your specific vehicle type** and press ►.
 - D3 for L319 Discovery 3 (LR3 in the USA). Select the model year. If “D3 2008-09” causes the vehicle to tilt or report a suspension error, select “D3 2004-07”.
 - D4 for L319 Discovery 4 (LR4 in the USA).
 - RRS for L320 Range Rover Sport. Select the model year.
 - RR for L322 Range Rover. Select the model year.

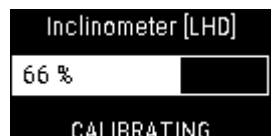


3. Next, use ▲▼ to **select** the correct **“Steering position”** (“RIGHT HAND” or “LEFT HAND”), then press ►.

- The EAS unit’s mounting orientation is mirrored between steering sides. This setting swaps the inclinometer axes. An incorrect setting prevents levelling from working properly.



4. You will return to the “Confirm Calibration” menu.
 - Read chapter 6, Calibration.
 - When ready, press ► to run the calibration procedure.



Congratulations! The installation is finished.

4.6. Removing XLifter from the vehicle

Remove XLifter by reversing the installation procedure, with the following points in mind:

- For temporary removal, leave the harness installed. Disconnect C from the XLifter EAS unit (see chapter 4, installation step 5c), then connect the bypass plug to C.
- Separate the EAS unit from the 3M reclosable fastener by pulling firmly perpendicular to its printed side, towards the centre console. Do not pull sideways. Leave the adhesive fastener on the original EAS unit. For installation in another vehicle, use a new fastener (not supplied): 3M SJ3550, 25 mm wide, with 39 heads per cm².

5. Instructions for use

The XLifter control module lets you adjust settings and view operating status. Think of it as a smart wireless remote for the air suspension.

The control module has four arrow buttons: ◀ ▲ ▼ ▶. Use ▲ ▼ to adjust values or scroll through menus. Right ▶ opens a menu or activates the selected item. Left ◀ usually goes back or cancels.

The XLifter home screen shows the most important status information:

- Selected lift program / lift / units
- The original vehicle height indicator shows the height selected on the centre console:



= Off Road height

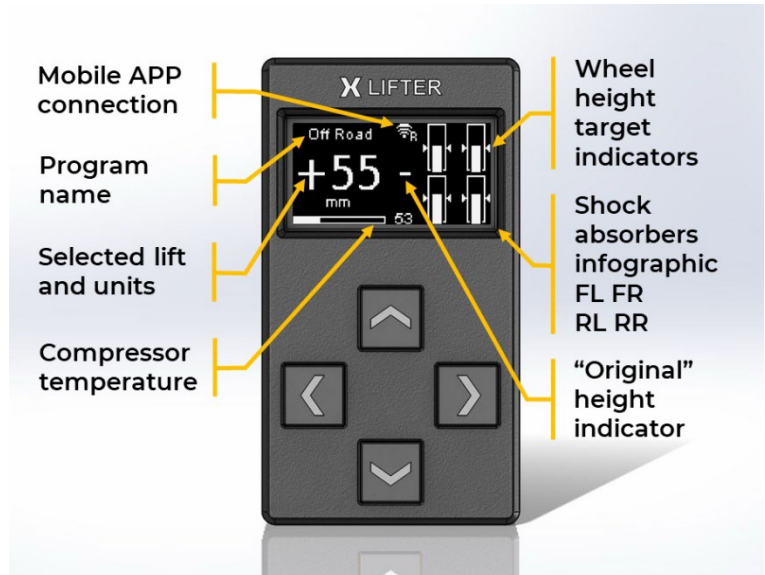


= Standard height



= Access height

- Shock absorber graphics: the outer edge represents the housing; the white column represents the inner rod connected to the wheel.
- The target height indicator shows the ideal wheel height for the selected program on a flat surface.
- The compressor head temperature gauge is empty at 25 °C or below and full at 130 °C.
- On the home screen, use ▲ ▼ to change the lift program or adjust height in 5 mm steps, depending on the active mode.



Overview of XLifter functions

All common features are accessible from the **main menu**.

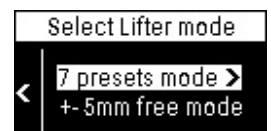
Press ▶ on the home screen to open the main menu.

Press ◀ in the main menu to return to the home screen.



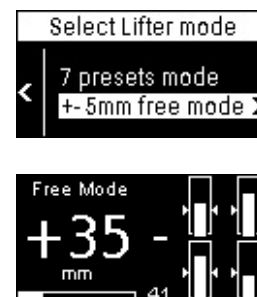
5.1. Lifter (7 presets mode): Change height in 7 predefined programs

1. Press ▶ to access the main menu.
2. Use ▲ ▼ to select "**Lifter**", then "**7 presets mode**", and press ▶ to activate it.
3. Use ▲ ▼ to change the lift program.
 - Sky Rocket – height + 75 mm.
 - Off Road – height + 55 mm.
 - One Inch Lift – height + 25 mm.
 - Aesthetic Lift – height + 15 mm.
 - Disengaged – height + 0 mm (default value).
 - Highway Drop – height - 15 mm.
 - One Inch Drop – height - 25 mm.
 - Super Drop – height - 35 mm.



5.2. Lifter (+- 5mm free mode): Free adjustment from -40 to +75 mm

1. Press ► to open the main menu, select “**Lifter**”, then “**+5mm free mode**”, and press ► to activate it.
2. Use ▲▼ to select the required height in 5 mm steps.
 - The selected lift value is displayed.
 - Hold ▲ or ▼ for auto-repeat.
 - In Lifter (+5mm) mode, "Free mode" is displayed as the program name.



Warnings and limitations of the Lifter and Lifter-free functions

- The original Land Rover height controls—the lever on D3 or buttons on D4—continue to work after XLifter is installed.
- XLifter's height adjustment is added to the original Land Rover height setting. For example, original Off Road height (+55 mm) plus XLifter's "One Inch Lift" (+25 mm) gives a total lift of +80 mm.
- XLifter is primarily designed for use with the original vehicle height set to "Standard". It can also be used at Off Road or Access height, subject to these limits:
 - △ At original Off Road height, avoid XLifter lifts above +25 mm for extended periods. "Sky Rocket" (+75 mm) is unavailable.
 - △ At original Access height, avoid lowering the vehicle by more than 30 mm. "Super Drop" (-35 mm) is unavailable.
- △ Exceeding these limits at original Off Road or Access height is likely to cause yellow suspension warnings. To clear them, set XLifter to "Disengaged" (+0 mm) and restart the engine.
- As a safety measure, XLifter does not alter the height sensor signals within 3 cm of either end of wheel travel.
- △ **Warning:** At extreme lifts—"Sky Rocket" (+75 mm), or any lift with the original height set to Off Road—use the accelerator gently when low range is engaged and the steering is turned sharply. The steep driveshaft angles place high loads on the CV joints.
- Avoid overworking the compressor. Repeated height changes can overheat it and trigger "Suspension raising slowly" or a yellow suspension warning. Diagnostics would indicate overheating. Above approximately 130 °C, the Land Rover EAS unit inhibits operation until the compressor cools, usually about 10 minutes. Once it has cooled, restart the engine to clear **the warning. Monitor its temperature and do not raise the vehicle when it is very hot.**
- The original height indicator estimates the setting by comparing average vehicle height with the calibrated height. Occasionally, detection may be delayed or incorrect. This is not a malfunction; the indicator is primarily informative.
- **If the ignition is on and the EAS unit loses communication with the control module for more than five minutes, it automatically selects Default lift (usually set to +0 mm).** This protects against control module failure, theft, damage or disconnection.



Warning: The original Land Rover EAS unit lowers the vehicle by 20 mm above 160 km/h. **Do not use XLifter on public roads or lower the vehicle at high speeds!**

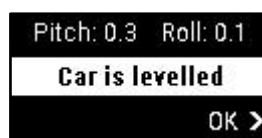
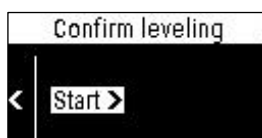
5.3. Levelling: self-level the vehicle

Self-levelling brings the vehicle to a calibrated position on uneven ground, primarily for comfortable sleeping in the vehicle or a rooftop tent.

XLifter can compensate for approximately **4.5° of pitch or roll, or a combination whose sum does not exceed 4.5°**. Available wheel travel determines these limits. Start levelling only at original Standard height to maximise available travel.

Activating the Levelling function:

1. Press ► to access the main menu.
2. Select “**Levelling**” and confirm with the ► button.
 - The current pitch and roll are displayed. The longer mark on the left indicates pitch; the shorter mark on the right indicates roll.
 - Use ▲▼ to switch between levelling screens at any time.
 - The detailed screen shows the target wheel positions needed to level the vehicle fully.
 - The compressor temperature screen allows temperature monitoring before and during levelling.
 - If pitch or roll exceeds the levelling range, its mark flashes and “!” appears beside the angle. The detailed screen also identifies wheels with insufficient travel.
3. Press ► to START LEVELLING.
4. Press ► to confirm levelling start.
 - You cannot return to the previous menu at this stage. Unequal wheel heights have been requested, making the vehicle unsuitable for driving. To cancel at any stage and restore normal operation, exit the levelling function.
 - The display shows levelling progress and current pitch and roll. Use ▲▼ to switch screens.
 - If the target accuracy of 0.5° is not achieved for pitch or roll, an additional fine-tuning cycle starts automatically (FINE TUNING).
5. To improve the result, press ► to select OK, choose “**Finetune levelling**” and press ►. XLifter starts another fine-tuning cycle from the current position.



When levelling finishes, the display shows “**Car is levelled**” and the current pitch and roll. You can then switch off the engine; the vehicle is ready for sleeping.

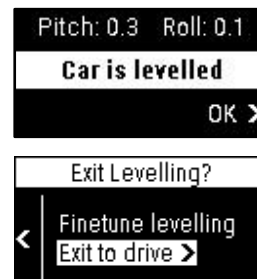
When you next switch on the ignition, the “Car is levelled” screen reminds you that levelling is still active.



Warning: Exit levelling before driving! Driving with unequal wheel heights can be dangerous and may damage the vehicle.

Exiting the levelling function:

1. Press ► to open the levelling exit menu.
2. Use ▲▼ to select “Exit to drive” and confirm with ►. XLifter restores the previous lift program; the vehicle returns to normal height when the engine runs.



Warnings and limitations of levelling:

- Start levelling at original Standard height to maximise usable wheel travel. XLifter displays a reminder if the vehicle is at Access or Off-road height.
- ⚠ **Monitor compressor temperature. Never start levelling when it is very hot;** let it cool first.
- ⚠ Levelling uses the full range of the air suspension. Yellow suspension warnings may occur near or beyond the tilt limits. If the vehicle is already reasonably level, switch off the engine. Exiting levelling and restarting the engine should clear these warnings.
- The air suspension cannot always level to within a few tenths of a degree. An accuracy of 0.5° is satisfactory. You can repeat fine-tuning if needed.
- Keep the engine running during levelling. Otherwise, the suspension compressor will not run and the vehicle will not rise.
- ⚠ **Warning:** Close all doors before levelling to prevent contact with the ground. Open doors may also prevent suspension movement, including the “kick trick”.
- Do not use the electronic parking brake (EPB) during levelling, as cable tension can restrict wheel movement. On automatic vehicles, use “P”. If on a slope, keep the foot brake applied, briefly releasing it about every 10 seconds to relieve tension caused by wheel movement.
- 💡 **The “kick trick”:** a levelling cycle takes 80 seconds. The suspension may react slowly to small height changes, especially during fine-tuning. To prompt a response, select original Off-road height on the centre console, then return to Standard as soon as the vehicle begins to rise.



Warning: NEVER start levelling while driving. Unequal wheel heights can be dangerous. **NEVER leave your campsite before exiting levelling!**



Tip: Levelling returns the vehicle to its calibrated sleeping position. If you prefer your head slightly raised or lowered, calibrate XLifter in that position.



Tip: The rear axle has more wheel travel than the front. Park facing uphill for a slightly greater levelling range: levelling raises the rear and lowers the front.

5.4. Trailer assistant: easier trailer operations

Trailer assistant raises or lowers the rear of the vehicle and its tow hitch. It changes the vehicle's pitch, increasing the hitch's adjustment range compared with a uniform height change.

Activating the Trailer assistant function:

1. Press ► to open the main menu, select "Extras", then "**Trailer assist**".
 - Use ▲▼ to adjust the rear height.
 - Before the first adjustment, confirm the "Is car stopped" safety prompt with ►.
 - Once you adjust the rear height, you cannot return to the previous menu. As with levelling, the changed pitch makes the vehicle unsuitable for driving.
2. To exit Trailer assistant, press ► and confirm "**Exit to drive**" in its exit menu. The vehicle returns to its normal state, as when exiting levelling.



Warnings and limitations of Trailer assistant:

The same warnings and limitations apply as for levelling. Read them before using Trailer assistant.



Warning: NEVER start Trailer assistant while driving. The change in vehicle pitch can be dangerous.



Warning: Exit Trailer assistant before driving. Driving with abnormal vehicle pitch can be dangerous and may damage the vehicle.

5.5. Compressor temperature monitor

Compressor temperature monitoring was introduced with the XLifter X2 EAS unit. The compressor is designed for short bursts, not continuous operation. Extensive use of XLifter increases air demand, so monitor its temperature.

- Compressor temperature appears below the lift value on the home screen.
- Press ◀ on the home screen to show the temperature screen with a graph of the last 10 minutes.
- Compressor temperature also appears during key functions, including levelling.



The measured range is 25 °C to approximately 130 °C. Below 25 °C, the display shows "<25". Above 125–130 °C, depending on the vehicle, its EAS computer switches off the compressor until it cools.

XLifter divides compressor temperature into three ranges:

1. Normal: below 25 °C to 70 °C — all operations are possible.
2. High: 71–110 °C—monitor the temperature closely and reduce use if necessary.
3. Very high: above 110 °C — let the system cool before using any function that raises the vehicle, including levelling.

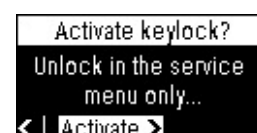
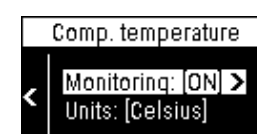
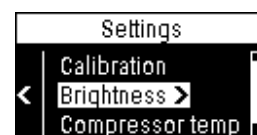


Compressor temperature monitoring can be disabled in Settings. Temperature units can also be selected there.

5.6. Menu “Settings”: User settings

The “Settings” menu contains the XLifter user settings:

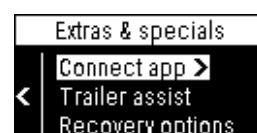
1. **Calibration** – XLifter calibration; see chapter 6.
2. **Brightness**
 - Adjust display brightness from 0% to 100% using the ▲▼ buttons. Hold a button for auto-repeat.
3. **Compressor temp**
 - Turn compressor temperature measurement on and off.
 - Set the temperature units to °C or °F.
4. The “**Activate Keylock**” item
 - Keylock locks the buttons to prevent changes to XLifter’s settings and displays “Keys are locked”. It does not change the current lift setting or stop an active function, including levelling or trailer mode. Before enabling Keylock for a driver unfamiliar with XLifter, make sure the vehicle is in a suitable mode and at a safe height.
 - Press ► to activate and ► to confirm. Keylock is now active.
 - **Keylock can only be deactivated in the Service menu.** See chapter 7.2



5.7. Menu “Extras & Specials”: Extra and recovery features

The “Extras” menu contains additional features and recovery tools.

1. “**Connect APP**” creates a local Wi-Fi access point for the mobile app.
 - This item is hidden if AppWifi is set to “Always On” in the Service menu.
2. The “**Trailer assist**” item – feature described in chapter 5.4.
3. The “**Recovery options**” submenu provides various recovery options. See the next chapter for details.



5.8. Menu “Recovery options”

We hope you never need the recovery features. If you encounter a problem, the following options may help.

1. The **ABS Recovery** feature:

an ABS sensor failure on a Discovery 3/4 or RRS can lower the vehicle by about 50 mm to “safe height”, close to the bump stops. If this happens in a remote off-road location and repair is not possible, activate “ABS Recovery” to raise it again. This adds 50 mm to all XLIfter height settings.

To disable it, return to the same menu and select “Deactivate”.



Important: Use ABS Recovery ONLY after an ABS failure. It does not repair the ABS sensor or increase total available lift; it only restores height. Use it temporarily to reach the nearest repair facility.



2. The **Suspension lock** feature

Intended use: changing a tyre with an inflatable air jack.

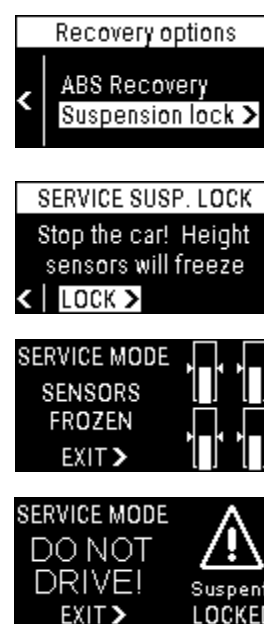
Suspension lock freezes the wheel height signals at their current values.

Normally, the suspension height sensor signals should remain active. An exception is changing a tyre with the engine running to power an inflatable air jack. The vehicle may otherwise adjust other wheels or enter extended mode. Suspension lock prevents this response by making the wheel height signals appear unchanged while the vehicle is jacked up.

To exit the Suspension lock, press the ► button.



Important: NEVER activate Suspension lock while driving. First ensure that the height is stable and the compressor is not running. Do not use the original Land Rover height controls while the lock is active. Doing so, or activating it during height changes, can trigger extended mode.



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6. Calibration

XLifter must be calibrated before first use.

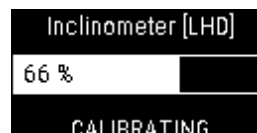
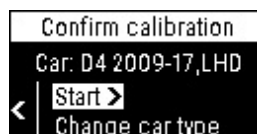
Calibration is essential for two reasons:

- XLifter records the vehicle's pitch and roll during calibration. This becomes the reference position to which it returns during levelling.
- XLifter also records the Standard wheel positions to calculate safety limits, shock absorber graphics, vehicle height detection and other parameters.

Calibration procedure:

1. Park on a flat, bump-free surface.
 - Keep the engine running during calibration.
 - Use a spirit/bubble level to check pitch and roll. XLifter will return the vehicle to this position during levelling.

△ **Important:** All wheels must rest on the same flat plane, with none in a dip or on a bump. Accurate calibration improves lifting and levelling.
2. Ensure that the "Original" vehicle height is set to Standard.
 - The "Original" height means the one set by the lever/buttons at the centre console.
3. Set XLifter to "Disengaged" (+0 mm) and wait until the vehicle has stopped rising or lowering.
4. Open the calibration menu and check the vehicle type.
 - a. Press ► on the home screen to open the main menu.
 - b. Use ▲▼ to select "**Settings**", then press ►.
 - c. Use ▲▼ to select "**Calibration**", then press ►.
 - d. Check that the vehicle type and steering side are correct. If necessary, select "**Change car type**" to correct them. See chapter 4.5, Vehicle type and calibration settings.
5. Run the calibration.
 - a. Select "Start" and press ► to begin calibration.
 - b. Allow about 30 seconds. The display shows calibration progress.
 - Keep the vehicle still during calibration. Avoid sudden movements that could rock it; the tilt sensor is highly precise.



Notice:



XLifter must be recalibrated if:

- Land Rover service tools are used to change the vehicle's height calibration, for example after replacing a suspension arm or height sensor.
- The XLifter EAS unit is moved, for example detached from its 3M fastener.

You can repeat calibration at any time.

7. Service menu

Technical and **configuration functions are grouped in the Service menu to keep normal operation simple**. This menu is not needed for everyday use and requires a special procedure to open it.

Use ▲▼ to select an item, ► to activate it and ◀ to go back, as in other menus.

7.1. Entering the Service menu

To open the **Service menu, hold any control module button while the module powers up**. Start with **the module off, hold a button** and *switch* on its power. Release the button once the Service menu appears.

Option 1 – disconnect the control module's 12 V plug (**all vehicles**)

- a) Unplug the control module power plug from the cigarette lighter socket (the display will turn off).
- b) Hold any button ◀▲▼► while reconnecting the power plug. The Service menu appears.

Option 2 – cycle the ignition (**Discovery 3**)

- a) Switch the ignition off by turning the ignition key into position 0. The control module display will turn off.
- b) Hold any button ◀▲▼► while switching on the ignition (key position II). The Service menu appears.

Option 3 – cycle the ignition (**Discovery 4**)

- Use this method particularly when the control module is hard-wired to the vehicle's 12 V supply.
- a) Switch off the engine by pressing "START ENGINE STOP" button.
- b) Stay inside the vehicle and **lock it using the smart key**. This switches off the ignition-controlled supply, including the cigarette lighter socket, and the control module display turns off.
- c) Hold any button ◀▲▼►, unlock the vehicle with the smart key, then switch on the ignition using "START ENGINE STOP". The socket powers up and the Service menu appears.

Exiting the Service menu:

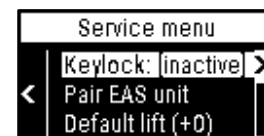
Press ◀ at any time. XLifter restarts in normal mode within 1–2 seconds.

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7.2. Service menu items

1. Keylock [ACTIVE! / inactive]

- Toggle the key lock on or off. Once locked, keys can only be unlocked through this menu.

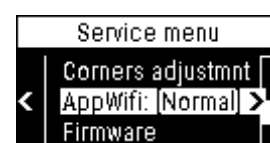
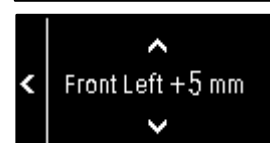
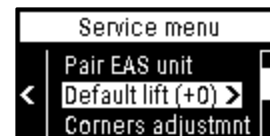


2. Pair EAS unit

- The control module and XLifter EAS unit are pre-paired. Use this function to pair them after replacing either unit.
- Initiates a Bluetooth scan. Pair only with the "XLIFTER EAS" device.

3. Default lift (+xx)

- Set the default startup lift from -15 mm to +55 mm. The XLifter applies this setting after a reset, battery disconnect, or if the controller is "offline" for more than 5 minutes.
- Ideal for tyres larger than 32 inches, effectively replacing mechanical lift rods.



4. Corners adjustment

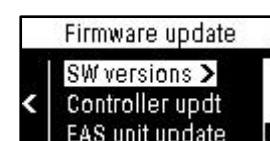
- Adjust each wheel independently by ± 20 mm.
- Use this to correct poor height calibration temporarily. Arrange proper calibration with diagnostic tools as soon as possible. **Use this feature only when needed.**
- A small arrow in the shock absorber graphics indicates an active offset.
- This feature does not increase the total available lift.

5. AppWiFi [Always On] | [Normal] – Access point for mobile APP

- Select [Always On] for a continuous WiFi connection, useful for vehicles with built-in tablets.
- Leave this set to [Normal] unless needed**, to avoid excessive power consumption or heating of the controller.
- Always set to [Normal] before performing firmware updates.**

6. Firmware

- SW Version:** Displays firmware versions.
- Controller Update:** Updates firmware for the control module.
- EAS Unit Update:** Updates firmware for the EAS unit.
- Serial Numbers:** Displays serial numbers of the EAS unit and control module.
- Comm Firmware:** Shows Bluetooth module firmware details.



7. Clear calibration

- Resets the XLifter calibration to its factory state.
- Required when transferring XLifter to another vehicle or before selling it.

8. Debug [ON]/[OFF]

- Replaces the shock absorber graphics with voltage readings from each wheel height sensor for diagnostics.

8. Firmware update

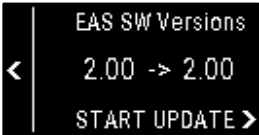
Firmware updates use the control module's built-in Wi-Fi. Upload a binary file containing firmware for both units through a web browser. The control module then updates the EAS unit.

At power-up, the control module offers an update if it detects new EAS firmware. You can also start it manually from the Service menu.

Control module update procedure:

1. Download the new firmware to your phone or laptop.
 - Save it in local storage, such as "My Files" or "Downloads". On an iPhone, use "On My iPhone", not iCloud Drive.
 - The file must be stored locally because the XLifter update network does not provide internet access.
2. Open the Service menu, select "**Firmware**" ►, then "**Controller updt**" using ►.
 - The control module creates a Wi-Fi network named "XLifterC". Its password appears on the second display line, after "p:".
3. Connect your phone or laptop to "XLifterC".
 - If your device warns that the network has no internet access, stay connected.
 - If necessary, disable automatic switching to other networks so your device stays connected to XLifterC.
4. On the connected phone or laptop, open a browser and enter <http://192.168.4.1/update> in the address bar. If the update page does not appear, switch off mobile data and try again.
5. On the page, select "Choose file", select the downloaded firmware, then select "Update".
 - The control module updates itself and restarts automatically.

EAS unit update procedure:

1. Open the Service menu, select "Firmware" ►, then "EAS unit update" ►.
 - The display shows the current and new EAS firmware versions .
2. Confirm the update: START UPDATE ►.
 - Allow the update to finish. The display shows progress; programming takes about one minute.
 - When complete, the display shows "Update successfully finished!"
3. Press ◀ twice to exit the Service menu. The control module restarts in normal mode.



Warning: Do not switch off the ignition during programming. Loss of power interrupts the update and may corrupt ("brick") the EAS unit's firmware. If this happens, see following "Emergency recovery" chapter.

Emergency recovery of a “bricked” EAS unit:

The normal update procedure will not work if the EAS unit's firmware is corrupted, most commonly by interrupted programming.

Typically, the display shows “Synchronizing” for one minute, then times out. The EAS firmware is damaged and cannot communicate with the control module.

The bootloader remains intact, but cannot start automatically without controller communication.

To recover the unit:

1. Remove the footwell cover to access the XLifter EAS unit.
2. Start an EAS unit update as described above. The control module will show “Synchronizing”.
3. Within one minute, while “Synchronizing” is still displayed, disconnect and reconnect connector C at the EAS unit. This resets the unit, starts its bootloader and resumes programming.

For the latest firmware updates, visit www.xlifter.com/firmware.

9. Technical specifications

XLifter X2 EAS unit				
Parameter	Min	Typ.	Max.	Unit
Temperature range	-40	-	80	°C
DC input voltage	10	13.3	16	V
Input current	0.5 (sleep)	40	120	mA
Wheel height sensor input voltage	0	-	5	V
TX output power (EIRP) / frequency range (wireless communication)	-4 / 2.400	0 / -	6 / 2.4835	dBm / GHz
Wheel adjustment range from calibrated height (front / rear axle)	-80 / -120	-	130 / 180	mm
XLifter control module				
Temperature range	-30	-	70	°C
DC input voltage	5	13.3	16	V
Input current	-	40	150	mA
TX output power (EIRP) / frequency range (wireless communication)	-4 / 2.400	0 / -	6 / 2.4835	dBm / GHz

Declaration of conformity



eXpedition tech s.r.o. declares that the XLifter X2 EAS unit and XLifter X1 control module comply with EU Directives 2014/53/EU, 2014/35/EU, 2014/30/EU and 2011/65/EU. They also comply with ETSI EN 300 328, ETSI EN 300 440, ETSI EN 301 489-1, ETSI EN 301 489-3, EN 55032, EN 55024, EN 62368-1 and EN 50581.

For details, visit https://www.xlifter.com/ce_compliance/.

Countries with radio restrictions

	AZE
	RUS
	UKR

XLifter may be operated under CTU General Authorisation VO-R/10/xxx in the Czech Republic or European Recommendation ERC REC 70-03. The country codes beside the symbol identify countries where use of this equipment's radio band is restricted (see technical specifications). Contact your distributor or local telecommunications authority for details.

WEEE disposal instructions



Correct Disposal of This Product (Waste Electrical & Electronic Equipment) (Applicable in countries with separate collection systems)

This marking means the product must not be disposed of with household waste. Take it to a suitable electrical and electronic waste collection or recycling centre.

10. Warranty conditions

The warranty follows generally accepted warranty terms. The product's appearance, functionality and completeness are checked before shipment. Submit any warranty claim to the seller within two years of the date of sale.

11. Contact and support

If you experience a problem or suspect something is not working correctly:

- Visit our online FAQ, with more than 40 entries: <https://www.xlifter.com/faq/>

Question	Answer
Keys are locked	Deactivate the keylock in the service menu. https://www.xlifter.com/faq/?open=41
The vehicle tilts to one side, the shock absorber graphics show opposite wheel movements, or the compressor runs excessively.	The vehicle type setting is incorrect. https://www.xlifter.com/faq/?open=32 https://www.xlifter.com/faq/?open=33
Levelling shows implausible or excessively high tilt angles.	The EAS unit may have moved or become detached from its 3M fasteners. https://www.xlifter.com/faq/?open=36
Find over 40 more answers at https://www.xlifter.com/faq	

- Join the “**XLifter user support group**” **Facebook group**:
<https://www.facebook.com/groups/XLifterSupport>
- Email info@xlifter.com or contact your dealer.

Space for your notes:

Date of production:

Date of sale/installation:

Serial number:

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