Air Lift Performance 3H /3P™

Control System
P A T E N T E D

preset ride   196 psi

80   ▶◀   80

65   ▶◀   65

AIR LIFT PERFORMANCE®

USER GUIDE

For maximum effectiveness and safety, please read these instructions completely before operating.

Failure to read these instructions can result in an incorrect installation.

Download the App for the Best #lifeonair

The Air Lift Performance 3 mobile app allows for full integration of your new 3H/3P control system on compatible mobile devices. Simply download the FREE app to not only take full control of your system, but to always have the latest system firmware with updates directly from the app.
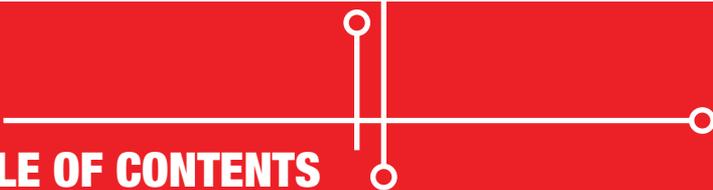
For iPhone: **air-lift.co/3app**
For Android: **air-lift.co/android**

Users can also search "Air Lift Performance" in either the Apple App Store or Google Play.

TABLE OF CONTENTS

Introduction

The purpose of this publication is to assist with the calibration, maintenance, and troubleshooting of the Air Lift Performance 3P or 3H control systems.

Read the entire user guide before beginning calibration or performing any maintenance, service or repair. The information includes a step-by-step calibration set-up, display options and functions, and diagnostic troubleshooting.

Air Lift Company reserves the right to make changes and improvements to its Air Lift Performance products and publications at any time. For the latest version of this User Guide, contact Air Lift Company at **(800) 248-0892** or visit **www.airliftperformance.com**.

IMPORTANT SAFETY NOTICES

⚠️ **WARNING** BEFORE SERVICING THE VEHICLE, MAKE SURE TO TURN OFF "RISE ON START" AND "PRESET MAINTAIN." THIS WILL ELIMINATE ANY UNINTENDED SUSPENSION CYCLING IF YOU NEED TO TURN THE KEY ON IN THE VEHICLE FOR ANY REASON.

⚠️ **WARNING** ONLY USE THE AIR LIFT PERFORMANCE 3 APP ON A MOBILE DEVICE WHEN THE VEHICLE IS IN A CLEAR LINE OF SIGHT. TO AVOID THE RISK OF SERIOUS INJURY OR HARM, VERIFY THAT NO PERSON OR THING IS NEAR OR IN THE WAY OF THE VEHICLE'S PATH OF TRAVEL WHILE CYCLING THE SUSPENSION.
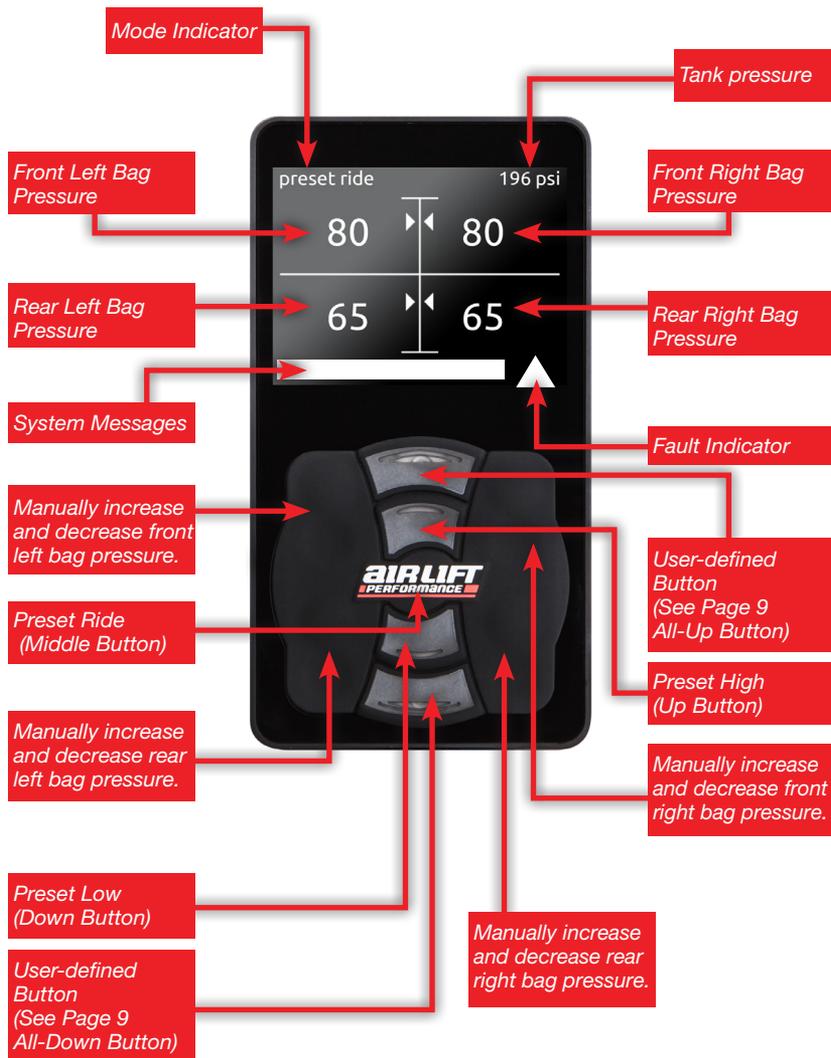
⚠️ **WARNING** FOR USER SAFETY AND TO PREVENT VEHICLE DAMAGE, THE SYSTEM HAS A 25% OR 25 PSI (1.7BAR) MINIMUM DRIVE HEIGHT AS THE DEFAULT. DUE TO EXTREME RISK OF DANGER TO THE USER OR VEHICLE, AIR LIFT COMPANY STRONGLY RECOMMENDS NOT TO CHANGE THIS VALUE. IF FOR SOME REASON THE MINIMUM DRIVE HEIGHT IS SET BELOW THE DEFAULT VALUE, AIR LIFT COMPANY SUGGESTS THIS SETTING ONLY BE USED WHILE THE VEHICLE IS STATIONARY. IT IS POSSIBLE TO SET THE VEHICLE AT A HEIGHT THAT IS BELOW THIS THRESHOLD, THEN START DRIVING. THIS IS A UNIVERSAL SYSTEM AND SETTINGS WILL BE DIFFERENT FOR EVERY USER AND VEHICLE. THE INSTALLER IS RESPONSIBLE TO DETERMINE HOW LOW THE SUSPENSION CAN BE SET WITHOUT CAUSING DAMAGE. IT IS THE SOLE RESPONSIBILITY OF THE USER, AND AIR LIFT COMPANY WILL NOT BE HELD LIABLE FOR, ANYTHING THAT MAY HAPPEN TO THE OPERATOR OR THE VEHICLE AS A RESULT OF THE USER'S CHOICE TO ALTER THESE DEFAULT VALUES BELOW RECOMMENDED MINIMUMS.

⚠️ **WARNING** FLOOR JACKS CAN BE DANGEROUS. WHENEVER USING A FLOOR JACK, MAKE SURE IT IS RATED FOR THE LOAD IT IS LIFTING. CHECK THE VEHICLE OWNER'S MANUAL FOR INFORMATION ABOUT WHERE TO PLACE THE JACK. BEFORE RAISING THE VEHICLE, PLACE WHEEL CHOCKS IN FRONT AND BEHIND THE WHEELS TO PREVENT THEM FROM ROLLING. ALWAYS USE JACK STANDS TO SUPPORT THE VEHICLE. NEVER GET UNDER OR PLACE ANY BODY PARTS UNDER A VEHICLE THAT IS SOLELY SUPPORTED BY THE JACK.

Main Controls

Mode Indicator

Tank pressure

Front Left Bag Pressure

Front Right Bag Pressure

Rear Left Bag Pressure

Rear Right Bag Pressure

preset ride   196 psi

80   80

65   65

System Messages

Fault Indicator

Manually increase and decrease front left bag pressure.

User-defined Button
(See Page 9 All-Up Button)

Preset Ride
 (Middle Button)

Preset High
(Up Button)

Manually increase and decrease rear left bag pressure.

Manually increase and decrease front right bag pressure.

Preset Low
(Down Button)

User-defined Button
(See Page 9 All-Down Button)

Manually increase and decrease rear right bag pressure.

Quick Reference Guide

Main Menu Screen	Sub-Menu	Data	Default
Display	Brightness	Level 1-10	Level 7
	Brightness Sleeping	Level 1-10	Level 4
	Sleep Time	5-59 Sec	10 Sec
	All-Up Button	All-Up	All-Up
		Front-Up	
		Preset	
	All-Down Button	All-Down	Air-Out
		Front-Down	
		Preset	
		Air-Out	
	Units	PSI	PSI
		BAR	
	Language	English	English
		Spanish	
		German	
		French	
Operation	Rise-on-Start	Off	Off
		On	
	Preset Maintain	Off	Off
		On	
	Minimum Drive Height	0-100 PSI (Pressure) 0-100% (Height)	25 PSI / 25%
	Pressure/Height Mode	Height	Pressure
		Pressure	
	Anti Cross-Load (Height) Axle Equalization (Pressure)	Off	On
		On	
	Show Mode	Off	Off
		On	
	Bluetooth Pairing	Off	Off
		On	
Setup	Sensor Tool	See Page 12	—
	Compressor	See Compressor Main Menu	—
	Min. Battery (Voltage to allow compressor to still run)	10-15 Volts	11 Volts
	Preset Mode	Double tap	Double tap
		Single tap	
	Factory Reset	Cancel	Cancel
		Reset All	
Compressor	On/Off	Off	Off
		On	
	Enable/Disable	Enabled	Enabled
		Disabled	
	Dual/Single	Single	Single
		Dual	
	Max Pressure	10342-13789mBAR (150-200 PSI)	10342mBAR (150 PSI)
	Duty Cycle	33%	50%
		50%	
		66%	
		75%	
		100%	
Calibration	Wizard	See Page 14	—

Getting Started

This User Guide is designed to demonstrate all the different menu options and default settings that will help make using this system easy and enjoyable.

1. To get to the main menu screen, push the middle (preset ride) button simultaneously with either the up (preset high) button or down (preset low) button.

2. All other settings and parameters will be detailed in the following pages to ensure the system is set up accurately.

3. Use the preset low and preset high buttons to scroll.

4. Green text indicates the last saved value.

Home

Enter

Back

User-defined button

Preset high (up)

Preset ride (middle)

Preset low (down)

User-defined button

Display

BRIGHTNESS

Set the brightness for the display while in use.
1. Level 1-10
2. Use the up and down buttons
   to increase or decrease luminosity
   in 10% increments.
3. Level 7 (default)

BRIGHTNESS SLEEPING

Set the brightness for the display after it goes into sleep mode.
1. Level 1-10
2. Use the up and down buttons to increase or decrease luminosity in 10% increments.
3. Level 4 (default)

SLEEP TIME

Set the amount of time it takes to revert back
to the main screen and for the display to go to sleep.
1. 5-59 seconds.
2. Use the up and down buttons to increase or decrease time in 1-second increments.
3. 10 seconds (default)
4. To disable sleep mode, turn the timer past 59 seconds to zero.

⚠ **WARNING** SETTING THIS TO ZERO WILL MAKE THE SYSTEM VERY RESPONSIVE AND MAY CAUSE UNINTENTIONAL ADJUSTMENTS.

Display, Cont.

ALL-UP BUTTON

Set function for the all-up button.
1. All-up (default)
2. Front-up
3. Preset

ALL-DOWN BUTTON

Set function for the all-down button.
1. All-down
2. Front-down
3. Preset
4. Air-out (default)

UNITS

Set units of measure to PSI or BAR.
1. PSI (default)
2. BAR

LANGUAGE

Set the language for the display. The system will boot to the language selection menu until a calibration is completed.

1. English (default)

2. Spanish

3. German

4. French

Operation

RISE-ON-START

This setting brings the vehicle to ride height at key-on if at a preset below ride height.
1. Off (default)
2. On

PRESET MAINTAIN

When enabled, the Preset Maintain will maintain the selected preset, whether pressure or height.
1. Off (default)
2. On

MINIMUM DRIVING HEIGHT

Set the minimum vehicle ride height. The system will not deflate below this level while driving.
1. 0-100 PSI (pressure mode) or 0-100% (height mode)
2. Hold down the up or down button to cycle quickly to 0 or 100 PSI or press the buttons individually to go up or down 1 PSI at a time.
3. 25 PSI (pressure mode) or 25% (height mode) (default)

Operation, Cont.

PRESSURE/HEIGHT MODE

Set system to operate in height or pressure mode.
1. Height
2. Pressure (default)

ANTI CROSS-LOAD/AXLE EQUALIZATION

Set system to equalize the axle to prevent cross-loading.
1. Off
2. On (default)

SHOW MODE

This provides operation with ignition off for one ignition cycle.
(Running the compressor(s) will drain the battery.)
1. Off (default)
2. On

BLUETOOTH PAIRING

Set to "on," to enable Bluetooth pairing with a compatible mobile device for one ignition cycle. If no display is present, pairing mode can be entered by: turning the ignition on 3 seconds, ignition off 3 seconds, ignition on.

Setup

SENSOR TOOL (HEIGHT MODE MUST BE ENABLED)

This tool is used to ensure that the range of the height sensors as installed are sufficient to provide optimal accuracy for the system. (Each time that this tool is used it will reset and initially show low range until the suspension is cycled to tell the system its range.)

1. At any time, press the "Preset Ride" button to exit the tool.
2. By cycling the suspension up and down, the tool will determine the following:
    -   **Range low** – Not enough range in the sensor to portray accurate data.
    -   **OK** – The range of the sensor is adequate for accurate data.
    -   **Limit** – The range of the sensor is at or beyond the bounds of acceptable data.
3. The "Preset Low" button can be used to reset the tool.

COMPRESSOR* (SETUP)

ON/OFF

Control the compressor(s) manually. In the default setting of "Off" the compressor(s) will operate normally. Selecting "On" will activate the compressor(s) for troubleshooting.

1. Off (default)
2. On

ENABLE/DISABLE

Enable or disable the compressor(s) until the next ignition cycle.

1. Enabled (default)
2. Disabled

DUAL/SINGLE

Set based on whether a dual or single compressor setup is installed. If using a second compressor and harness, dual must be selected for proper operation.

1. Single (default)
2. Dual

* The 3H/3P system can be installed with one or two compressors.

Setup, Cont.

MAX PRESSURE

Set the maximum tank pressure. The compressor(s) will turn on at 15 PSI below max tank pressure.

1. 10342-13789mBAR (150-200 PSI)
2. Holding the up or down button quickly cycles between 10342mBAR (150 PSI) and 13789mBAR (200 PSI). A single press changes pressure one increment at a time.
3. 10342mBAR (150 PSI) (default)

DUTY CYCLE

This is for the user to set the compressor(s) duty cycle.

⚠ **WARNING**   SETTING THE DUTY CYCLE HIGHER THAN THE MANUFACTURER'S RECOMMENDED VALUE MAY CAUSE DAMAGE TO THE COMPRESSOR(S).

See Page 25 for compressor duty cycle and working pressure.

MINIMUM BATTERY VOLTAGE

Set minimum battery voltage required to allow the compressor(s) to turn on.

1. 10-14 volts
2. 11 volts (default)

PRESET MODE

Set the button sequence for commanding a preset.

1. Double tap (default)
2. Single tap

⚠ **WARNING**   SETTING THIS TO SINGLE TAP WILL MAKE THE SYSTEM VERY RESPONSIVE AND MAY CAUSE UNINTENTIONAL ADJUSTMENTS.

FACTORY RESET

Resets all settings and calibration back to factory default.

1. Cancel (default)
2. Reset all

Cycle ignition to complete the factory reset.

Calibration

WIZARD

Run this program to complete calibration. At any time, cancel calibration by pressing "stop."

1. Make sure the vehicle is on a level surface and select "Yes."
2. Verify that the front wheels are straight to prevent damage to fenders, then select "Yes."
3. Verify nothing is under the vehicle that could cause undercarriage damage, then select "Yes."
4. Verify that the manifold is securely mounted, then select "Yes."

NOTE *An unmounted manifold will not allow Preset Maintain to function properly.*

5. Determine how many compressors are in use. If using a single compressor, select one. If using two compressors with the second compressor harness (kit number: 27703) select two.

6. The system will ask if it should use manual or automatic pressure calibration. The user should select manual calibration if ride pressures will be over 100 PSI (6.9BAR) or if the calibration failed during automatic calibration.

NOTE *If automatic calibration fails, try setting max and min pressure values 1.4-2BAR (20-30 PSI) above and below typical ride pressure.*

7. If height sensors are installed, select "Yes." If running as a pressure only system, select "No." If only running pressure, system will now skip to step 8.

8. If height sensors are installed, select whether to calibrate them automatically or manually. Most vehicles can be calibrated automatically. The manual option can be used when there is a custom setup where there may be concern about component interference at either high or low limits.
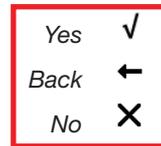
Calibration, Cont.

9. After selecting "Yes" the system will begin calibration. Selecting "No" will exit the calibration wizard.

10. System checks to make sure manifold is mounted in a proper orientation.

11. System is calibrating the accelerometer.

NOTE *If manual pressure calibration is selected, the system will ask the user to set the maximum and minimum pressures.*

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12. System is now calibrating the front axle for Pressure mode.

13. System is now calibrating the rear axle for Pressure mode. If using the system for Pressure only, calibration will complete after this step.

14. **Height Sensor Calibration (upper limits)**

    a. If Auto Sensor Calibration was selected, the system will cycle the suspension to calibrate its upper limit position.
    b. If Manual Calibration was selected, the system will now ask for the user to set the "Upper Limits." Do this by using the manual buttons to raise the suspension to its highest setting on all four corners. Press the middle button when complete.

15. **Height Sensor Calibration (lower limits)**

    a. If Auto Sensor Calibration was selected, the system will now cycle the suspension to calibrate its lower limit position.
    b. If Manual Calibration was selected, the system will now ask for the user to set the "Lower Limits." Do this by using the manual buttons to lower the suspension to its lowest setting on all four corners. Press the middle button when complete.

16. System will now check Height Sensor vehicle wiring (Only completes this if user selected Auto Sensor).

17. The system will now perform a movement calibration for height mode.

18. Once it has run through the calibration wizard successfully, it will say "Calibration Successful" and the system will then be ready for use.

Calibration Detail Explained

AUTO SENSOR LIMITS

When the program is completing the auto sensor calibration, make sure the wheels are straight and all people stand clear as the vehicle will move up and down during calibration. The user doesn't have to do anything during this portion of the calibration.

MANUAL SENSOR LIMITS

Below is what the system is doing during the wizard's manual sensor calibration. Use this option when making a custom setup where there may be concern about component interference at either high or low limits. *(e.g. Wheel to fender interference – if the system is aired out and the wheel and fender make contact before the suspension can reach its limit.)*

1. Set upper limit
   - Use the manual buttons to set the upper height sensor limit.
   - Press the ride preset button to continue.
2. Set lower limit
   - Use the manual buttons to set the lower height sensor limit.
   - Press the middle button to continue.
3. Calibration is complete.

PRESSURE

Below is what the wizard is doing during the pressure calibration. Auto pressure calibration targets 0-6.9BAR (0-100 PSI). If the ride height is outside this range, manual calibration is suggested.

Automatic Pressure Calibration

1. **Front calibration** – The system actuates the suspension through its range of travel to calibrate pressure mode on the front axle.
2. **Rear calibration** – The system actuates the suspension through its range of travel to calibrate pressure mode on the rear axle.
3. At any time, cancel calibration by selecting "stop."

Manual Pressure Calibration

1. **Set upper limit** — Use manual buttons to set upper pressure limit. Press ride preset to continue.
2. **Set lower limit** — Use manual buttons to set lower pressure limit. Press ride preset to continue.

Calibration Detail Explained, Cont.

HEIGHT

Below is what the wizard is doing during height calibration.
The system will actuate the suspension through its entire height range to calibrate height mode.
1. Movement calibration
    *   A message will indicate completion of the movement calibration.
    *   Press the middle button to continue.
2. At any time, cancel calibration by pressing "stop."

MANIFOLD

Below is what the wizard is doing during manifold calibration.
1. If the manifold is mounted correctly, it will indicate "Complete – calibration successful."
2. If the manifold is mounted incorrectly, it will indicate "Fault – calibration failed."
3. If mounted incorrectly, follow the Installation Guide for proper mounting of the manifold and run calibration again.

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Firmware Updates

MOBILE DEVICE APP

The app, which is free and requires no additional hardware, is available in the Apple App Store and for Android devices in Google Play. Search for Air Lift Performance.

Download on the **App Store**

GET IT ON **Google Play**

- Operation of the mobile app is similar to operation of the 3H/3P controller. The main difference is to access the menu screens, tap the gear in the upper right corner.
- App users will get notifications that there is a firmware update, app update or other system update.
- Firmware updates can only be made through the mobile app.

After installing the system, all users should download the app and check for firmware updates.

The apps are available at these links:
For iPhone: **air-lift.co/3app**
For Android: **air-lift.co/android**

Check **www.airliftperformance.com/firmware** periodically for firmware updates.

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Firmware Updates, Cont.

SWITCHING TO LANDSCAPE MODE

Users have the option of changing the orientation of the 3H/3P controller to landscape mode.

- To change modes, update the firmware and choose "Keypad Normal," "Keypad Right" or "Keypad Left."
- While the controller can be used with the display to the right or left of the keypad, it cannot be oriented so that the keypad is above the display.
- To rotate the keypad, remove the two screws on the back of the controller. Remove the keypad, rotate it to the preferred position and re-secure the screws to .01Nm (14-16 oz.-in.), which is essentially finger-tight.

> **Updating Firmware**
>
> status
>
> **Choose Display Configuration**
>
> Keypad - Normal
>
> Keypad - Right
>
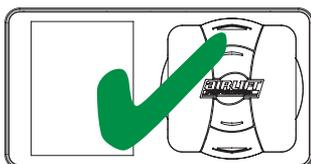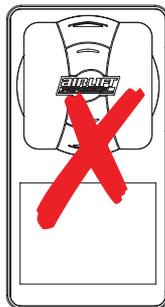> Keypad - Left
>
> **No Display**
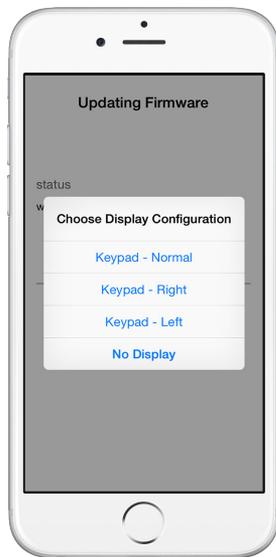
⚠ **CAUTION** DO NOT OVERTIGHTEN.

3H/3P DISPLAY ORIENTATION OPTIONS

Keypad - Normal

Keypad - Right

Keypad - Left

Additional Information

PRESET MODES

There are three standard preset modes used in this system. If the user chooses, the all-up and all-down buttons can be set as two additional presets which will follow the same requirement for operation below (see page 9).

Presets are viewed, used and changed/saved with the following procedures:

User-defined preset

Preset high

Preset ride

Preset low

User-defined preset

DOUBLE TAP

1. Press the appropriate preset key once to display current preset values.
2. Double press the preset key to obtain the preset value that is currently saved.
3. Press and hold the preset key to change the preset value.

SINGLE TAP

1. Press the appropriate preset key once to display and obtain the preset.

2. Press and hold the preset key to change the preset value.

CHANGING PRESETS

1. Press and hold the preset key you want to change. The display will allow you to manually change those values using the corner keys. (Values will be shown as PSI for pressure and percentage for height).

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2. Press and hold the preset key again to save your selected values.
3. To exit without saving the current preset, press any other preset button at any time.

DEFAULT SETTINGS

1. **Preset low** – 1.72BAR (25 PSI) [pressure] / 25% [height]
2. **Preset ride** – 3.44BAR (50 PSI) [pressure] / 50% [height]
3. **Preset high** – 5.17BAR (75 PSI) [pressure] / 75% [height]

⚠ **WARNING** IT IS POSSIBLE TO SET THE VEHICLE AT A HEIGHT THAT IS BELOW THE MINIMUM DRIVE HEIGHT THRESHOLD, THEN START DRIVING. THE 3H/3P SYSTEM IS A UNIVERSAL SYSTEM AND SETTINGS WILL BE DIFFERENT FOR EVERY USER AND VEHICLE.

About

Select this option to see what version of software is running on the system, product serial number and Bluetooth identification address.

Users may need to provide this information when calling Air Lift Company customer service.

The manifold or display software can be updated using the mobile app.

Check **www.airliftperformance.com/firmware** periodically for firmware updates.

System Messages

Label	Fault	Problem
NOTICE	Calibration not completed	Customer attempts to use presets prior to calibration.
NOTICE	Manifold upside down, please re-mount	The manifold has been mounted in an unacceptable orientation.
⚠ **CAUTION**	Leak detected on corner (FL, FR, RL, RR*)	A leak has been detected between manifold and the air spring that is causing a drop in air pressure.
⚠ **CAUTION**	Check height wiring and plumbing (FL, FR, RL, RR*)	The system has detected that the either the wiring is incorrect or not responding or lines are plumbed incorrectly for the given corner.
⚠ **CAUTION**	Waiting for tank to fill	Detected that tank pressure dropped 1BAR (15 PSI) below user defined max tank pressure value.
⚠ **DANGER**	Height sensor failure (FL, FR, RL, RR*)	Detected that sensor signal has gone invalid or out of range for the given corner.
⚠ **CAUTION**	Range fault	Height sensor range is too low to provide accurate data to the user and will need to be adjusted to provide adequate sensor travel.
⚠ **CAUTION**	Limit reached	Height sensor travel is out of acceptable range of 10-90% of full sensor travel. Re-adjust sensor to be in range of acceptable wheel travel.
⚠ **CAUTION**	Min drive height reached	The system has detected vehicle is moving and therefore prevented vehicle from going below minimum drive height.
⚠ **CAUTION**	Low battery voltage	Vehicle has reached the user defined set value for minimum battery voltage used for disabling the compressor.
⚠ **CAUTION**	High battery voltage	Vehicle has detected battery voltage above 16V.
⚠ **DANGER**	Pressure sensor failure (FL, FR, RL, RR*)	Detected a pressure sensor failure at the manifold block for the corner sensor.
⚠ **CAUTION**	Pressure preset mode disabled	System has detected a failure in the pressure sensor and disabled pressure preset. Can still operate height preset if installed.
⚠ **DANGER**	Corner height sensor failure (FL, FR, RL, RR*)	Corner height sensor voltage is out of range.

* FL = Front left corner
  FR = Front right corner
  RL = Rear left corner
  RR = Rear right corner

System Messages, Cont.

Label	Fault	Problem
⚠ CAUTION	Corner height sensor near limit (FL, FR, RL, RR*)	Height sensor range is near limit of operation at the given corner.
⚠ CAUTION	Compressor freeze	The system has detected no increase in tank pressure when compressor commanded on. Compressor may be blocked.
⚠ CAUTION	Compressor overrun	The compressor duty cycle has been reached and excessive usage has been detected which could overheat the compressor. Compressor is disabled.
⚠ CAUTION	Tank pressure sensor failure	The system detected a pressure sensor failure at the manifold block for the tank sensor. System will disable the compressor when a tank pressure sensor failure has been detected to eliminate the opportunity of overfilling the tank.
⚠ CAUTION	Tank pressure too low	Tank pressure has fallen below 5.9BAR (85 PSI). Will reset when pressure reaches 5.9BAR (85 PSI).
⚠ DANGER	Adjusting minimum ride height below 25% may result…..	Setting the minimum driving height below the 25% default may result in vehicle damage and personal injury. Agreeing to and understanding this safety concern will allow the system to be set below 25%.
⚠ CAUTION	Firmware update required or Incompatible revision	The manifold and display firmware are not at the same revision level and need to be updated to access all features. The system will only operate in manual mode until updated. Use the free iOS or Android app to update the firmware on the manifold and display (see pages 18-19).
⚠ CAUTION	Invalid mount	The manifold is not mounted in an allowed orientation. Remount the manifold in an allowed orientation and recalibrate.
⚠ CAUTION	Height calibration	The system is in height mode but a height calibration has not been completed. The system will only operate in manual mode until a height calibration is completed.
⚠ CAUTION	Pressure calibration	The system is in pressure mode but a pressure calibration has not been completed. The system will only operate in manual mode until a pressure calibration is completed.
⚠ CAUTION	Mount calibration	The manifold orientation calibration has not been completed. The system will only operate in manual mode until a manifold orientation calibration is completed.
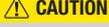
INTEGRATED DIAGNOSTICS

The 3P and 3H air management systems have an integrated diagnostics tool that can be used to validate your install or troubleshoot any potential system issues. The manifold will only perform the diagnostic routine if ignition is on prior to a battery connection to the manifold. The FL valve will generate a series of clicks separated by a pause which indicates either a pass code or an error code. Count the number of clicks before and after the pause and use the table below to decipher the code.

1. Ensure that ignition is ON
2. Turn rise-on-start and preset maintain OFF.

⚠ **CAUTION**   BEFORE SERVICING THE VEHICLE, MAKE SURE TO TURN OFF "RISE ON START" AND "PRESET MAINTAIN." THIS WILL ELIMINATE ANY UNINTENDED SUSPENSION CYCLING IF YOU NEED TO TURN THE KEY ON IN THE VEHICLE FOR ANY REASON.

3. Air out the vehicle and disconnect the FL air line from the manifold.
4. With ignition still on, disconnect and reconnect the manifold electrical connector.

Code	Description
No clicks	Poor battery or ignition harness connection
Pass code 1-1	Manifold Is Functioning Properly. Battery and ignition harness connections are OK.
Error code 2-1	Manifold 5V Display Supply Error
Error code 2-2	Manifold 5V Height Sensor Supply Error
Error code 2-3	Manifold 3.3V Pressure Sensor Supply Error
Error code 2-4	System Battery Voltage Low (Below 9V)
Error code 2-5	Manifold Solenoid Over-Current Detected
Error code 3-1	Manifold FL Solenoid Failure
Error code 3-2	Manifold FR Solenoid Failure
Error code 3-3	Manifold RL Solenoid Failure
Error code 3-4	Manifold RR Solenoid Failure
Error code 3-5	Manifold Tank Solenoid Failure
Error code 3-6	Manifold Exhaust Solenoid Failure
Error code 4-1	Compressor 1 Error (Main Compressor Relay or Main Harness Issue)
Error code 4-2	Compressor 2 Error (Second Compressor Relay or Second Compressor Harness Issue)

VIAIR Compressor Duty Cycle/ Working Pressure

COMPRESSOR RATINGS (STANDARD: 16444)

Max working pressure: 13.8BAR (200 PSI)
Duty cycle at rated pressure: 50% @ 13.8BAR (200 PSI),
100% @ 6.9BAR (100 PSI)

Users have the option of installing several other compressors. Below are examples with their duty cycles and working pressures.

Air Lift P/N VIAIR Compressor	Max Working Pressure	Duty Cycle @ Rated Pressure
16130 (100C)	9.0BAR (130 PSI)	15% @ 6.9BAR (100 PSI) and 9.0BAR (130 PSI)
16190 (325C)	10.3BAR (150 PSI)	33% @ 6.9BAR (100 PSI) and 10.3BAR (150 PSI)
16380 (380C)	13.8BAR (200 PSI)	55% @ 13.8BAR (200 PSI) and 100% @ 6.9BAR (100 PSI)
16400 (400C)	10.3BAR (150 PSI)	33% @ 6.9BAR (100 PSI) and 10.3BAR (150 PSI)
16444 (444C)	13.8BAR (200 PSI)	50% @ 13.8BAR (200 PSI) and 100% @ 6.9BAR (100 PSI)
16450 (450C)	10.3BAR (150 PSI)	100% @ 6.9BAR (100 PSI) and 10.3BAR (150 PSI)
16480 (480C)	13.8BAR (200 PSI)	50% @ 13.8BAR (200 PSI) and 100% @ 6.9BAR (100 PSI)

Notes

Notes

Need Help?

Contact our customer service department by calling (800) 248-0892. For calls from outside the USA or Canada, dial (517) 322-2144.

AIR LIFT PERFORMANCE

Thank you for purchasing Air Lift Performance products!

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